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ABSTRACT

The primary objective of the largely exploratory study was an empirical examination of familial socialization practices and their influence on ambition (measured as education and occupational expectations) of black and white males and females. Existing generalizations about career expectations were extended by establishing comparisons on the basis of sex and race, and by adding indicators of family structure, parental socialization practices and sex-specific behavioral patterns. Twenty-nine hypotheses were tested to determine if parental socialization practices would vary by race and sex of respondents, as suggested by existing literature. The actual results differed markedly from those expected. Major findings were that social origin influenced the career plans of all males more than all females and that early marriage plans of black females were associated with high occupational expectations. There also appeared to be research implications for the development of a concept of sex roles. The data base, an unbiased subsample of a larger 1970 cross sectional youth study, consisted of questionnaire responses from 2170 black and white male and female seniors from Louisiana public and private high schools. Appendices include the questionnaire and a comparison of data sets. (SB)

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SOCIALIZATION, AMBITION, AND CAREER EXPECTATIONS:
RACE-SEX VARIATIONS AMONG ADOLESCENTS

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A Thesis

by

DOROTHY ELIZABETH NOEL

Submitted to the Graduate College of
Texas A&M University
in partial fulfillment of the requirement for the degree of

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August 1978

ABSTRACT

Socialization, Ambition, and Career Expectations:
Race-Sex Variations among
Adolescents. (August 1978)

Dorothy Elizabeth Noel, B.S., Madison College
Chairman of Advisory Committee: Dr. J. Steven Picou

The primary objective of this study was an assessment of the effects of familial socialization on educational and occupational expectations. Specifically, the study focused on the relationship between race and sex and the theoretical and empirical linkages associated with the influence of familial background and parental socialization practices on ambition, measured as educational and occupational expectations.

The source of the data was a larger cross-sectional youth study that selected high school seniors, both male and female, for the state of Louisiana in the fall of 1970. An unbiased subsample of the original data set which contained complete information on all the questions of interest was selected. The analysis data set was comprised of 836 white males, 871 white females, 179 black males, and 284 black females.

Theoretical and empirical literature was reviewed to develop a conceptual position for this study. The conceptual framework posited that parental socialization practices would differ by race and sex of the respondents. Twenty-nine hypotheses were generated and tested utilizing two statistical approaches: correlation analysis and Goodman's log-linear technique.

In general, the results indicated that the differences in socialization and in the influence of socialization on educational and occupational plans varied considerably from the hypothesized relationships. Two major findings were that social origins influenced the career plans of both black and white males more than those of black and white females, respectively; and the early marital plans of black females were associated with high occupational expectations. The theoretical, conceptual, and empirical implications of these results are discussed, and the limitations of the study are presented as well as suggestions for future research.

DEDICATION

To the memory of my
maternal grandparents:

DOROTHY MCCABE GIBSON
and
ANSON WRIGHT GIBSON

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Many are owed acknowledgements for providing the means, the stimuli, and the education which culminated in the writing of this thesis. Some were central in its immediate preparation, while others played a part as invisible but ever-present and scrutinizing guides. Although this thesis is a modest one, my debts are many, and I will take this opportunity to express my appreciation.

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CHAPTER I

INTRODUCTION

Statement of the Problem and Objectives of Research

Beginning with the phrase in the Declaration of Independence stating that all "men" are created equal, there has been in America a belief in equality of opportunity for all. With industrialization and bureaucratization, the means by which equality was to be assured was through mass education. However, practices existed which suggested that equality of opportunity was not accorded to blacks or women. In the late nineteenth and early twentieth centuries, massive social change attempted to rectify some of the inequalities through laws such as the fifteenth amendment to the Constitution which gave blacks citizenship rights; the centralization of education into a government function in the late nineteenth century; and the nineteenth amendment to the Constitution which gave women the right to vote. But in the 1960's with the advent of the Civil Rights movement and the beginnings of the women's movement, social inequalities in the United States were brought to public attention.

With education seen as the means to provide equality of opportunity, the 1960's and early 1970's have seen volumes of research aimed

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This thesis follows the literary style of the Pacific Sociological Review.

at detailing the equities and inequities of the educational process. Research has found that access to higher education is differentially distributed (Perrucci, 1976; Sewell, 1971; Jencks, 1972; Roby, 1975). It has also been noted that primary and secondary schools promote inequality through unequal distribution of financial and community resources and through differential curricula (Carlson, 1972; Coleman, 1968; Jencks, 1972). Although the majority of these studies and many others published under the auspices of status attainment research have been restricted to white males, several studies have noted the depressant effects of nonwhite racial background (Carter and Picou, 1975; Kerckhoff and Campbell, 1977) and the female sex (Alexander and Eckland, 1974; Treas, 1976) on achievement. Some researchers attributed these differences to innate genetic factors (Jensen, 1969; Tiger and Fox, 1972; Goldberg, 1974); others to familial and educational socialization practices which teach these two groups to believe in their inferiority (Sewell, 1974; Weitzman, 1975; Roby, 1975; and Freeman, 1970) and still others to occupational discrimination and segregation (Blau, 1975; White, 1970; Astin and Myint, 1971; Gross, 1968; Knudsen, 1969; Epstein, 1970b).

This research will neither attempt to determine the genetic importance nor the impact institutional discrimination has on the educational or occupational ambitions of blacks and women. Rather, it will focus on the social psychological aspects of the socialization process. This process takes place both in an informal manner through parents, peers and neighbors, and in a formal sense through institutionalized means such as schools and religions in which case it is often termed education. The review of theoretical and empirical literature will discuss the developmental processes whereby it is believed that a child is socialized and comes to make educational and career choices. The specific research problem will be restricted to assessing the degree to which differential socialization patterns for educational and occupational achievement are evident in a group of high school seniors in Louisiana in the fall of 1970. More specifically, the question to be answered by this research is: are there differences in career expectation levels which can be attributed to differences in socialization patterns of males and females and blacks and whites?

Significance of the Problem

The importance of determining the influence that socialization has on expectations can be better understood by surveying the differences in educational, occupational and income levels for males (black and white) and females (black and white). In 1973 more than 40 per cent of women workers were concentrated in only 10 different occupations while the 10 largest occupations for men employed less than 20 per cent of all the male workers (U.S. Department of Labor, 1975:91-2). Occupational segregation for black women is considerably different than that for white women. Black women are more likely to be in service occupations and to be private household workers, particularly if over 35 years of age. The younger black women are moving into clerical and other white collar occupations though they are still more highly represented in operative and blue collar work than are white women (U S. Department of Labor, 1975:102-5). Black males have been increasingly moved into white collar jobs but mainly low-paying salaried professional employment (e.g., social work and teaching). Still only one-third of them are in white collar or skilled occupations while about two-thirds of white males are in these same occupational categories (Anderson, 1974:265-6).

Though the median years of school completed for males and females is approximately the same--12 years--(U.S. Department of Labor, 1975: 187) the percentages of males and females attaining advanced degrees show great discrepencies. In 1974 women received 44.2 per cent of all bachelor's degrees conferred and 43 per cent of all master's degrees; but only 19.1 per cent of all doctoral degrees and 9.8 per cent of all first professional degrees (which included degrees in law, medicine and dentistry) (National Center for Education Statistics, 1977:186-8).

Although the gap between whites and blacks in median years of school completed has been greatly narrowed since 1910 and more blacks are entering college, whites are increasingly completing college and going on to graduate school (Anderson, 1974:269). In the 14 to 24 year age group, blacks continue to have almost twice as large a percentage of their population who have not received a high school diploma (males: blacks 18.1 per cent. whites 9.9 per cent; and females: blacks 18.9 per cent, whites 11.0 per cent) (National Center for Education Statistics, 1977:197).

The earning gap between men and women, whether only full time workers or all workers are considered, continues to widen. For all women the median income in 1973 was $2,796 which was only about one-third of the $8,056 income of all men. For full-time workers, women received only 57 per cent of that earned by men. Minority women, working full-time earned 88 per cent of what white women who worked full time did (U.S. Department of Labor, 1975:130-7). Black men earn only about 66 per cent of what white men do, even when both groups have completed a college education (Anderson, 1974:268-9).

These statistics reveal the substantial differences in the achievements of males and females whether they are black or white. Many authors (Epstein, 1970b; White, 1970; Falk, G., 1975; Roby, 1975; Carter and Picou, 1975) have attributed some of these differences to discrimination. But Uhlenberg (1972) notes that while both the Japanese-Americans and Mexican-Americans underwent severe discrimination during the early twentieth century, the Japanese-Americans have today achieved economically and educationally while the Mexican-Americans have been relatively unsuccessful. It becomes apparent that the use of discrimination as an explanation by itself is of minimal use. While determining the impact of discrimination is beyond the scope of this thesis, it is hoped that through the study of the process of socialization certain insights into the dynamics of the process of discrimination can be explicated.

One possible explanation for the lack of educational and occupational achievement of women and blacks is that it is due to differential socialization patterns. Reinforcing this position is the observation that despite federal legislation making it illegal to discriminate on the basis of sex or race, and despite agencies such as the Equal Employment Opportunities Commission which enforce such legislation, occupational segregation continues to persist.

The general objective of this thesis is an assessment of the role familial socialization plays in the restriction of educational and occupational expectations for women and blacks. In other words, how does the social structure, in the form of social origins and family structure, interact with social-psychological factors, such as parental socialization practices and marital expectations, to limit the career expectations of females and blacks?

CHAPTER II

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Relevant Theory

Introduction

Warshay (1975) notes that most theories which have stimulated empirical research in sociology are not large theories such as structural functionalism or conflict theory. Rather, sociology has been dominated by small theories which are more amenable to the study of comprehensible problems. Further, Warshay points out that sociology is characterized by conceptual empiricism such that "the use of concepts rather than explicit theory [is] the focus of research" (1975:90). The positive side of conceptual empiricism, the inductive approach to theory building, is also noted by Warshay.

With Warshay's comments in mind, it can be pointed out that this thesis is an exemplar of the domination of sociology with small theories and empiricism. Among the small theories to be reviewed are socialization theories in general and more specifically sex-role socialization theories. Other small theories to be used aré role, balance and reference group theories.

Socialization Theories

Four general theories of socialization, which provide an understanding of the differential socialization patterns associated with sex and race, will be briefly described. These theories are: (1) psychoanalytic theory, (2) behavioristic-learning theory, (3) cultural anthropological theory, and (4) the sociological-role approach.

Psychoanalytic theory. Freud was perhaps the first social scientist to delineate a theory of socialization through his clinical development of psychoanalytic principles in the late nineteenth and early twentieth centuries. While stressing a developmental approach to individual personality in which early childhood experiences affected later behavior, Freud relied on biological and instinctual factors as the main explanatory variables.

Central to Freud's theory was the concept of psychic energy which provided the basis for all psychological work. At birth the only psychic energy a child possessed was generated by innate bodily needs manifested in behavior as instincts to be gratified. With time and contact with events and objects in the child's surroundings, psychic energy began to develop that could be invested in an object or event to perceive and retain memories of it (termed cathexis). More precisely, Freud believed that "a child learns the social and cultural traditions of his group through a cathetic process of identification with parents and their surrogates and the incorporation of such identifications into the character structure, and particularly the superego" (Williams, 1972: 48). The character was composed of the id, containing the instincts and sometimes termed the "pleasure principle"; the superego which developed through the cathexes with parents and parental behavior (particularly punishing and rewarding behavior); and the ego, which mediated between the id and the superego (termed the "reality principle") and attempted to solve the instinctual needs of the id (hunger, sex, thirst, etc.) in realistic ways. The superego was the part of an individual's character which, through the process of identification with the punishment and rewards of parents, acted as though it were an external authority forcing the individual to conform to group traditions. Included in Freud's conception of childhood socialization were five stages of psychosexual development (oral, anal, phallic, latency, and genital). An individual could become fixated at any one of these stages resulting in different psychological manifestations.

In summary, the major emphases for Freud were the relationships within the family such that any personality differences could be attributed to the socialization practices of the family (Williams, 1972; Lundin, 1972; Elkin, 1966; and Zigler and Child, 1969). One of the major criticisms of Freudian theory is that it is so complex and diffusely stated that it has never been developed to the point where testable propositions could be deduced (Zigler and Child, 1969; Williams, 1972).

Behavioristic-learning theory. The behavioristic-learning theories of Thorndike, Hull, Skinner, and Miller and Dollard developed out of a desire by psychologists to overcome some of the weaknesses of psychoanalytic theory combined with an interest in the experimental works of Watson and Pavlov. Though there are numerous variants of learning theory, there are several common features useful for understanding the concept socialization. "Learning, as used by psychologists, is a broad term applying to all behavior--motor, mental, and social--which derives from training procedures; only maturational developments are omitted"

(Elkins, 1966:41). Behavior is viewed, in this theory, as a function of forces applied to the child. These forces are considered to be stimuli and the behavior elicited by them is considered to be responses. These theorists seek to derive the principles which link a stimulus to a response. This has led to the development of principles of conditioning, i.e., an old response is given to a new stimuli, and reinforcement, i.e., a new response is generalized to any stimuli. Learning is seen to initiate from a drive to reduce basic body needs. But those primary drives can become associated with a secondary drive, such as need for approval, so that it comes to act as a stimulus.

Miller and Dollard have applied much of what has been learned about stimulus-response reinforcement in animals to human behavior. Significant to their theories is the concept of imitation which is important for explaining socialization. In order to reduce a primary drive, a child imitates the behavior of those around him/her. If this behavior is rewarded,it has been reinforced;and if it is not,then it is extinguished. With age the child begins to develop acquired drives which have been motivated by the reinforcement of stimuli derived from the child's social context. These acquired drives, such as fear, social conformity, and desire for money, are learned and eventually lead to a drive to higher mental processes (Elkins, 1966; Williams, 1972; Zigler and Child, 1969).

Learning theory has been useful in providing ideas which allowed theories of socialization to move away from a doctrine of instinct. But it is mainly useful in understanding relatively simple behavioral situations. The focus of learning theory is upon the process of learning independent of any particular social setting (Elkins, 1966:43-4; Williams, 1972:45; Zigler and Child, 1969:467).

Cultural anthropological theory. Anthropologists have used many psychoanalytic principles in their studies of socialization into societies and cultures (see Sapir, 1949; Kardiner et al., 1939, 1945; Erikson, 1950; LaBarre, 1954, 1969). But it was through the work of anthropologists that the limited usefulness of the principles of psychoanalytic and behavioristic-learning theories were discovered. In studies of non-industrialized, relatively "primitive" societies, such as the Papago Indians of North America (Williams, 1972:48-63), it has been shown that the means by which to reduce basic needs are not controlled by rewards and punishments during the early childhood years. As the child begins to learn the language, i.e., to symbolize, the ability to modify his/her behavior on the basis of some unobserved properties of an object due to past experiences (termed reflectivity) become more common. It is the use of symbols which allow for reflective thought that is the essence of the socialization process (Williams, 1972:60-1).[1]

Anthropologists have detailed in ethnographic reports the ability of groups or culture to achieve voluntary control over reflexes and drives. Yoga practitioners are capable of voluntary control of body reflexes which enable them to raise their diaphragms, to vomit voluntarily, and to clean the stomach, bowel, and bladder. The voluntary control of pain reflexes can be seen in the reports of self-torture in the Cheyenne Sun Dance, and firewalking among the Zuni Indians, and the tribes of the Pacific Islands. Voluntary control of drives can be seen in the diversity of ways by which humans meet their need for food, including the number of meals and calories eaten daily, and environmental limitations which restrict a diet to purely carnivorous or purely herbivorous sources (Williams, 1972:67-78). From this ethnographic material it has been deduced that humans have the capacity, through reflection and symbolism, to voluntarily shape features of human biology not considered to be malleable. Socialization is theorized to be a process in which the adults have cultural preoccupations that become preoccupations to the child, as a function of the child's reactions to pressures from adults to conform and to his/her own physiological necessities and capacities for symbolizing and reflecting. The child's preoccupation then imparts upon the adult's attitudes and values related to this particular preoccupation.[2] In this view, a reciprocal, mutual feedback between culture and human biology are seen as the primary facts in the development of an individual (Williams, 1972).

Sociological role theory. The sociological contribution to socialization theories has been termed social role theory. Rather than being a theory in the sense of an interrelated set of propositions capable of being empirically tested, the social role approach is a conceptual model which "recognizes that a child is born into an ongoing society with common symbols, established patterns, and recognized positions, and that it is through others that a child learns these elements of the social world" (Elkins, 1966:19). Though there is much debate on the uses and meanings of the terms status and role,[3] underlying social role theory is a consensual agreement that a status is a position in the social structure while a role is the pattern of expected behavior (norms) associated with that status (Elkins, 1966:19).

The foundations of this theory are to be found in the writings of the philosophers William James, Charles Horton Cooley, and George H. Mead on the development of the self, which is the key to role behavior. It was James, in Principles of Psychology, who divided the self into the known and the knower. The basis for the self as known included a social self based on the images of himself which others present to him (Lundin, 1972:100-101; Coser and Rosenberg,1964:259). Charles Horton Cooley further explicated the process whereby the self develops out of the reactions of those in primary associations to its behavior, i.e. parents and siblings. He termed this process the "looking-glass self" and considered it to contain "three principle elements: the imagination of our appearance to the other person; the imagination of his judgment of that appearance, and some sort of self-feeling, such as pride or mortification" (Cooley, 1972:231).

But it was in George H. Mead's lectures describing the interrelationship between mind, self and society that the central concepts for social role theory began to emerge. As an infant begins to develop language, imitation of significant others is involved. However, this imitation is not merely a reproduction of what the organism hears, but rather a response to an initial stimuli. In imitation the individual influences himself as others influence him. It is through the child's learning to be an object to his/her own activities, by acting toward him/herself as he/she would act toward others,that the "self" develops. It is easiest to see the self develop through the activities of a child. First the child plays at specific roles, one at a time. The child does this by linking together behavior expected of a particular status. The child then learns to respond to the expectations of several people at one time, termed the game stage by Mead. Once the child has come to view him/herself from the standpoint of the group, the attitude of the generalized other has arisen. Development of the generalized other is internalized by the child so that behavior appropriate to most social situations becomes standardized on the basis of one's evaluation of his/her behavior through this internalized conception of the self (Mead, 1962; Elkin, 1966:32-35).

It is this ability for reflective intelligence which Mead thought separated humans from lower animals. The mind emerges when the organism can express meaning to himself and others, which requires reflectivity. There is an interdependence between the development of society and the development of individual minds and selves. Though there are social aspects in the behavior of most living organisms, it seemed to Mead that human society was possible through the use of language to control the environment. The ability to take the role of the other was important in the development of cooperation which is necessary for the converting of individuals into a self-conscious community (Mead, 1962).

It is the development of the self, acquired through the ability to "take the role of the other," that is central to the child's ability to function within a system of statuses. Role theory does not attempt to explain idiosyncratic behavior but rather the commonalities in the process whereby a child comes to function in society. Mead's position on the development of the self was further elaborated by the theoretical school in sociology, which grew out of his work, termed symbolic interactionism.

This view emphasizes the central place played by meaning, interaction with others, and the interpretation of the interaction based on the individual's definition of the situation (Blumer, 1969:2). For the symbolic interactionists, the social structure emerges from the interaction process. Therefore, every generation is capable of remaking society through a consensual agreement among interacting individuals taking each other into account (Douglas, 1973:216-7).

Social role theory, though receiving its foundations from Mead and the symbolic interactionists, has been given its greatest impetus by Talcott Parsons.[4] Parsons' interest in the area arose from an attempt to conceptualize the structuring of the "social system" through an emphasis on institutionalized roles and norms. "Borrowing from Freud and Durkheim, Parsons (1951) views socialization as the 'internalization' of society's rules, values, and motivations, controlling man's biological urges and providing him with a 'blueprint for behavior'" (Douglas, 1973:170). Parsons views socialization as the process whereby humans are made to fit into the social order and if socialization is successful, there should be little change in society. Therefore, behavior is determined by society.

Orville Brim (1960) has combined the interactionist ideas within Parsons' social system context. Roles are always prescribed in the sense of requiring certain behavior, attitudes and motives, as well as relating to other roles in reciprocal manners which define interaction. The learning of these roles and their reciprocal requirements occurs through interacting with others in numerous social situations and by taking the "role of the other." The social structure regulates what the child learns by controlling his/her exposure to the culture. So roles are viewed as designated responses to expectations of others, or "role taking." Brim fails to include the tentative, and creative process involved in role behavior, termed "role-making" by Turner (1962:21-2). Therefore, Brim sees variation in personality as a result of subcultural differences in child-rearing practices, and differences in specific individuals with which the child interacts.

In conclusion, it appears there are two interrelated components involved in the socialization of a person into a role. One component of a role is its cultural content which includes the skills, knowledge, and behavioral attributes necessary for interacting with significant others in a role set (the collection of reciprocal roles that interlock with a given role). The second component is the acquisition of a self-identification with the role which involves the child's internalization of values and goals related to the role. Socialization involves the combination of these two components until the person has developed the ability and desire for performing the role acceptably (Simpson,1972: 169). This process involves several agencies of socialization, including the family, the peer group, the school, and the mass media.

Underlying the four theories of socialization discussed to this point is the idea that a child is not socialized by all people who make up the society or culture into which he/she is born. All four theories note the importance of those people with whom the child comes in direct contact. For Freud the family was most important in the socialization process. The behaviorist-learning theories showed that imitation involving observation of the behavior of those around the child was important. Anthropologists have stressed the reciprocal relationship between the child and the adults around him. Social role theory has elaborated the importance of specific individuals in the socialization of new members of the society. The concept of "the other" was central to the works of those writers (Cooley, Dewey, Mead) who laid the ground work for symbolic interactionism. The essence of socialization is "the idea that meaning, thought, and the self arise alike in the relationship between the actor and his alters" (Kuhn, 1964:6). It is Harry Stack Sullivan's coining of the term "significant other" to refer to those people whose evaluation of the individual are highly valued by that individual, that provides the basis for the testing of significant other influences in this thesis.

To this point we have been concerned with general theories of socialization. The next section will detail some of the differences in socialization and manifestations of socialization found to exist between cultural and other group division in American society.

Sex-Role Socialization Theories

Several theories previously discussed have either explicitly or implicitly contained components useful in explaining the process whereby the sexes are socialized to their gender identity and the behavior appropriate for that gender. The process of sex-role socialization according to these theories will be detailed and briefly analyzed.

The comparative psychologists, on the basis of data collected on other species, conclude that biology is the basis of gender identity and behavioral sex differences. Tiger (1970) has shown that males form alliances "in a variety of situations involving power, force, crucial or dangerous work" and from which they "consciously and emotionally exclude females" (p. 143). But the debate over this and other studies attributing sex differences to biology has only just begun. Lancaster (1973) has found that female monkeys have dominance hierarchies and that the rank of young monkeys depends on the rank of their mother and their sibling order.[5]

The psychoanalytic approach combines a grounding in biology with the social learning derived from family dynamics on the personalities of males and females. Freud presumed that sexual identity and erotic stimulation were interconnected as was noted in our general discussion of Freud's theory of socialization. He believed that males and females passed through the oral and anal stages of psychosexual development in the same manner. But with the genital stage the male experiences a love for his mother, termed the Oedipal complex. This is resolved through the boy's identification with his father. The female, it was believed by Freud, experiences penis envy. Holding her mother responsible for her deficiency, she becomes attached to her father. Realizing she cannot have her father fully, she turns back to her mother for love and as her referent for her self-concept. For the male, fear of castration destroys the Oedipal desires and leads to the development of a strong superego. Since the female has already experienced feelings of castration, this cannot act as a mechanism for reducing her Oedipal desires. According to Freud (1976), this results in the female having an immature superego and inadequate moral development.

Parsons' (1955) functionalist role theory, stressing the Freudian stages of psychosexual development, details the family structure as central to the sex-role socialization of the child. The nuclear family is treated as a small social system with the central constructs being female expressiveness and male instrumentality. There is a complementarity of these two roles which insures the stability of the family. The father links the external world to the family in satisfying the goal needs of the family and "meeting the adaptive conditions of [the system's] maintenance of equilibrium" (Parsons, 1976:205). The mother fulfills the expressive needs of the family through the maintenance of integrative relations between the family members, and by regulating the patterning and tension levels of the family (system). For the larger society, the family serves as a means by which the child internalizes the society's norms in order to be able to eventually fulfill adult roles. Each child identifies with the same sex parent so that the male develops an active, outward orientation to the world while the female develops an emotional, highly personal view of the world from her mother.

Parsons (1976) deviates from the work of Freud in noting that the male encounters the greatest difficulty in sex identification. While the female remains tied to her mother for self-identification throughout the socialization process, the male undergoes greater strain since he must break away from the emotional protection of his mother and identify with the less familiar father. The personality differences, as seen by Parsons, are a combination of social and biological differences, with the culture having the greatest impact. Parsons concludes, by noting the potential results of socialization in American society, that:

> other things being equal, men would assume more technical, executive, and 'judicial' roles, women more supportive, integrative and 'tension-managing' roles. However, this is at best an extremely broad formula and other things very often are not equal (1976:214).

Though qualifying his theory, Parsons fails to discuss what those other things could be. Critics have shown that family roles are not so clearly differentiated (Blood and Wolfe, 1960; Aronoff and Crano, 1975). This theory has led one to suspect that children with only one parent will fail to internalize the proper roles and norms. However, in reviewing previous studies of children from one and two parent families, Yarrow (1964) found few differences between the two groups.

The social learning theorists have elaborated on Parsons' notion that the boy has the more difficult time in constructing his identity. But these theorists distinguish between parental identification, i.e., "the internalization of personality characteristics of one's own parent and unconscious reactions similar to that parent," and sex-role identification, i.e. "the internalization of the role typical of a given sex in a particular culture and the unconscious reactions characteristic of that role" (Lynn, 1971:42-3). This distinction allows for the incorporation of models other than parents, such as teachers, peers, and the media. Further, this theory distinguishes between the desire to adopt behavior associated with one sex, sex role preference, and the actual incorporation of expectations associated with one sex, sex role identification. While emphasizing the problems males have in our society, this theory also shows the prestige associated with masculinity that led females to prefer and identify with the male role.

Through the work of Bandura and Walters (1963), social learning theory has combined stimulus-response learning theory with social identification theory, detailing three components which are involved in the development of sex differences. Rather than emphasizing psychosexual stages of development, social learning theorists view sex-role development as part of a continual process of learning. The first component involved in the development of sex differences is differential reinforcement. Children are rewarded for behavior considered to be appropriate to their sex and punished for that which is not appropriate, therefore increasing the likelihood of the former while reducing the probability of the latter. Maccoby and Jacklin (1974), in surveying the previous research on differential socialization of the two sexes, found a high degree of uniformity. But they admit their data is limited, particularly by the unavailability of information on the socialization patterns of fathers. They do note that boys undergo more intense socialization than girls. Boys "receive more pressure against engaging in sex-inappropriate behavior, whereas the activities that girls are not supposed to engage in are much less clearly defined and less firmly enforced. Boys receive more punishment, but probably also more praise and encouragement" (Maccoby and Jacklin, 1974:348).

Bandura and Walters' second component, imitation, refers to the child's performing as he/she has seen others, particularly those in authority. An assumption is made that children tend to imitate same-sex adults more than opposite sex adults. It is this component which leads learning theorists to assume that males have a more difficult time with their identification since adult males are much less frequently to be found in the social world of the home during the day or in schools during primary grades. The third component, observational learning, is similar to imitation in that the child learns by observing the behavior of others, but the behavior is not performed at once and often appears months or years later. Research has demonstrated the influence of reinforcement and imitation on children's behavior (Bandura and Walters, 1976; Hyde and Rosenberg, 1976; Duberman, 1975).

However, studies (Bandura, 1965; Maccoby and Jacklin, 1974) have produced evidence to challenge the assumption that imitation is more with same-sex than opposite-sex models. Bandura's (1965) study and the majority of those studies reviewed by Maccoby and Jacklin (1974) used small children as their subjects. In analyzing their findings, Maccoby and Jacklin conclude that in terms of behavior acquired through modeling there is little sex-typing in early childhood. For those studies using children over 12 years of age or adults, imitation of same-sex models was evidenced only when sex was considered to be situationally important (1974:290). Since the respondents to be used in this thesis are in their last year of high school much of their behavior falls under the guise of anticipatory socialization.[6] In attempting to take on the roles that they feel they would like to fulfill as adults, the appropriate behavior for their sex is likely to be situationally relevant most of the time. This would suggest that same-sex persons would be their models more often than opposite-sex persons.

A theory which has had great impact on the psychological study of sex differences was formulated by Kohlberg (1969). He criticized both psychoanalytic theory and social-learning theory for the stress they put on the mother-child relationship. The significant factor, to Kohlberg, in the development of a person's psychosexuality is his or her self-categorization. This self-categorization takes place partially through the identification placed upon the child at birth and partially due to the child's cognitive self-judgements. Only after the child has categorized him/herself does he/she identify with members of his/her own sex and turn to sex-appropriate toys because gender identity has led the child to be motivated to see him/herself positively. Therefore, the cultural role appropriate to one's sex comes to be valued as "good" or "right." Rather than seeing sex status as based on parental identification or reinforcements, Kohlberg's theory "assumes that basic sexual attitudes are not patterned directly from either biological instincts or arbitrary cultural norms, but by the child's cognitive organization of his social world along sex-role dimensions" (1966:82). Kohlberg fails to explain how self-categorization takes place without influence from others, and his model has only been elaborated for the case of males. Since the male role is valued more highly in American society than the female role, Kohlberg's contention that the child comes to value the role appropriate to her gender identity fails to be consistent with cultural messages.

The work of Kohlberg, Freud and Lynn all contain elements suggesting that the male role is more highly valued in American society. Further, Rosenberg and Sutton-Smith (1960) found that girls show a greater preference for the games of boys, while boys show no concomittant interest in the games of girls. In surveying research on expressing of sex-role preferences, Weitzman (1975) concluded that there is more cross-sex preference among girls than among boys especially among the middle and upper classes. It would seem that the aspirations of males and females, particularly in the middle and upper classes, would be highly similar. But indicators of expectations should include the realization by females that structural and internalized barriers will limit their achievements.

The issue of class differences is particularly important for understanding sex-role socialization. The reality of classes in the United States has been empirically demonstrated both in terms of objective facts that indicate their existence and in terms of the subjective reality of individual consciousness (Warner and Lunt, 1945; Centers, 1949). Differences in child-rearing practices and levels of aspiration between middle- and lower-class people as well as explanations for the continuation of poverty lead to the development of the concepts of "culture of poverty" (Lewis, 1966) and "lower class culture (Miller, 1958). But these perspectives have been classed as examples of "blaming the victim" (Ryan, 1976).

Schneider and Smith (1973) propose a theoretical position to explain kinship and sex-role differences between the lower class and the middle class. The lower class is characterized by occupations which are unskilled, unstable laboring jobs or service occupations with little chance of promotion, or skilled work that allows for advancement only to fully skilled worker. This must be analytically separated from the working class who are in an intermediate stage between the ideal-type cases of the lower and middle class. The working class is oriented toward mobility with a sense of security not found in the lower class. But sex-role differentiation persists as do segregation of conjugal roles and continuation of ties between nuclear family members and other kin.[7]

Succinctly, Schneider and Smith view the "cultural values of equality and achievement . . . as . . . derived from the more general cultural stress upon individualism" (1973:24). This stress on individualism is common to all Americans but there is differential stress on the culturally defined goals and the method of evaluating the means for attaining these goals. For the middle class rationality is the value used to evaluate both the means and the ends such that universalistic standards are used. Security, in terms of particularistic standards and traditional criteria, is the value used by the lower class for the same evaluations. The upper-class does not stress security but particularism and tradition are emphasized so that they have more in common with lower-class than with middle-class culture. But they uphold the "norms of rationality and achievement--for others" (Schneider and Smith, 1973:27).

Those values used to evaluate means and ends also effect the kinship system. For the lower class, kinship ties with a wide variety of family and nonfamily members are kept open to allow for help, cooperation and solidarity among many people. But the middle class stresses the self-sufficiency and solidarity of the nuclear family. The priority, in the middle-class, is on the solidarity of the relationship between husband and wife. But the lower class pattern stresses the mother-child solidarity while the separation of men and women is distinguished. Authority, in the middle class, is not vested by legitimation of tradition, but by who knows best how to handle any situation. The rationality of decisions are taught through independence training such that the child learns self control (and therefore deferred gratification). But among lower-class families, authority is vested in the males due to their strength, dominance and traditional right to make decisions. Tasks are segregated on the basis of traditional sex-roles. In child-rearing there is less emphasis on the control of impulses for achieving goals. Rather submission to tradition is taught.

With the emphasis in middle-class families on independence of the nuclear family, when a father is not present the family is considered to be broken. But among the lower-class families, "a husband is not an essential basis for the existence of a household" (Schneider and Smith, 1973:59) since the primary relationship is between the mother and child. Further, few children are fatherless. They have contact with their father and his relatives even when he does not live with them. So it would appear that a broken home would be more detrimental to the sex-role development of middle-class children than lower-class children.

Status Attainment Theories

Status attainment theories, as formulated by sociologists, focus on both educational and occupational attainment in explaining movement in the status hierarchy. It developed out of theoretical and methodological shifts which occurred during the late 1950's and 1960's. Until that time, "occupational" or "social" mobility researchers were mainly concerned with the process whereby a vector of status origin, such as father's occupation, was transmitted to a vector of current status, such as son's occupation. The assumption was that intergenerational mobility was the result of societal influences rather than individual characteristics. Methodologically, analysis was based on mobility tables and difference scores, which represented mobility both within and between generations. This restricted the analysis to mere description, rather than causal explanation, which led to dissatisfaction and movement away from these techniques (Carter and Carter, 1971).

Both the method of analysis and the theoretical emphasis were modified in the shift from social mobility to status attainment research. The level of analysis moved from the societal to the individual level in an effort to find the intervening variables most useful in explaining an individual's current social status. This shift from intergenerational to intragenerational mobility resulted from Duncan's redefining of father's occupation as " . . . the 'origin status' of a son as he approached entry into the labor force . . . [the] indicators of father's status cease to be treated explicitly as characteristics of the father, [and] are now considered to be the son's origins" (Carter and Carter, 1971:22). Techniques of analysis involved a shift from difference scores and mobility tables to regression analysis, in order to attempt to specify the causal sequence through which a person reaches his position in the status hierarchy (Haller and Portes, 1973).

The Blau-Duncan model (Blau and Duncan, 1967), detailing status transmission, was one of the first attempts to use this new technique of analysis. This model was composed of two antecedent structural variables (respondent's education and first job), and the output variable (respondent's occupation in 1962). This model emphasized the influence that inherited status and previous positions in status hierarchies have on later levels of attainment. While the researchers found that parental status has some direct effects which are significant,". . . their primary influence on occupational attainment is indirect via educational level" (Haller and Portes, 1973:57).

An extension of the Blau-Duncan model, the Wisconsin model (Sewell, Haller, and Portes, 1969), was developed to employ social psychological variables as well as social structural variables. Social origins, measured by socioeconomic status of parents, and mental ability are treated as the exogenous variables influencing academic importance. These variables influence the level of encouragement (both occupationally and educationally) provided by significant others, such as parents, teachers and peers. The influences of significant others impact on educational and occupational aspirations of the youth, which affect later status achievements.

Though both models present the same causal ordering: parental status--→educational attainment--→early occupational attainment, the Blau-Duncan model views parental status as having a direct effect on educational and occupational attainment of the child, while the Wisconsin model attributes influence of parental status to indirect or mediation of effects through significant other influences on the individual (Haller and Portes, 1973).

Both the Blau-Duncan and Wisconsin models have been found to be more powerful in explaining the basic status attainment process for white than for black males (Porter, 1974; Carter and Picou, 1975; Portes and Wilson, 1976), and for upper-status whites than for lower-status whites (Kerckhoff and Campbell, 1977). It is still further questioned as to whether they are applicable to women (Haller and Portes, 1973; Sewell, 1971; Osipow, 1975). Few attempts (Falk and Cosby, 1975; Alexander and Eckland, 1974) have investigated what is considered to be the female-peculiar aspects of the process.

Approaches to Structural and Attitudinal Barriers to Female Educational and Occupational Attainment

One of the first to elaborate the differences in structural elements for the occupations of women and men was Caplow (1954). Among the structural differences Caplow notes are: the handicapping of women's careers by the demands and interruptions of household and family responsibilities; the low prestige and importance of jobs filled by working wives; and the determination of place of residence by occupational location of the main breadwinner. Caplow also notes the special statuses, rules and regulations reducing female occupational opportunity; such as bans on the employment of married women, nepotism rules that do not allow males and females to be employed by the same employer, and seniority rules that weigh heavily on females due to the intermittent character of their work history (Caplow, 1954).

A developmental framework to conceptualize the occupational choice process for females was attempted by Psathas (1968). His major contribution was a set of contingencies he believed affected the process for women including desired age of marriage, desired social status of marital partner, fertility plans, financial situation of the family, parental educational and occupational achievements, and general desires for a career outside the home.

In 1969, Zytowski, also using a developmental approach, conceptualized nine postulates of career development for females. He detailed three components of career participation which he thought could distinguish female patterns of work: age of entry into the labor force; the span of participation; and the degree of participation indicated by employment in a male-dominated or female-dominated occupation. Zytowski brought motivational factors into the scheme by pointing out the importance of both internal and external factors in determining career patterns.

A recent attempt to explain female occupational choice, using a modification of the Wisconsin model, has been made by Falk and Cosby (1975). In this model, both mother's and father's education and occupation are included as distinct measures of SES to allow for the testing of the differential influence of each parent on the female's socialization. Based on Psathas' theory, family finances and the presence of brothers in the family were included as exogenous variables. Marital and fertility plans were also included at the same point in the temporal ordering of the variables as are educational and occupational aspirations.

Analysis of career patterns for males was introduced by Miller and Form (1951) and later simplified by Super (1957) into four classifications: stable, conventional, unstable, and multiple-trial career patterns. In order to analyze the career patterns of females, Super found it necessary to add three extra categories due to the addition of the homemaker role. The seven types of career patterns for females are: the stable homemaking career, the conventional career (i.e., work between the termination of schooling and marriage), the stable working career, the double-track career (i.e., combined work and marriage), the interrupted career (i.e., work terminated for childbearing activities), the unstable career (i.e., numerous shifts from working to homemaking, often caused by irregular economic pressures), and the multiple-trial career (i.e., a succession of unrelated jobs).

Martin (1971), in investigating female career patterns, notes that ". . . the evolving pattern of the female's work life suggests that she will have three or perhaps four separate work careers rather than a lifetime of work" (Martin, 1971:17). These include the single girl, the married woman in economic straits, the married woman with children, the separated or divorced woman and the widowed woman. These stages include situations in which women work out of necessity, rather than personal preference.

Several attitudinal conflicts which have a bearing on the occupational development of women have been outlined by Matthews and Tiedeman (1964). The first conflict arises out of women structuring their lives according to a belief that men do not approve of career-oriented women, especially those women who have careers in male-dominated occupations. In order to maximize their chances for marriage, many women steer away from successful career opportunities. Psathas (1968) further explicates this point by stating that a female's perception of the attractiveness of an occupation is based on her perception of the manner in which males view that occupation and more specifically women in that occupation.

The second major conflict, as noted by Matthews and Tiedeman, is the conflict between the traditional role of wife and mother and the career-oriented role. Using balance theory, (Heider, 1958; Osgood and Tannenbaum, 1955) one can better understand how these conflicts are resolved. Heider's theory largely dealt with situations involving two persons and one object, and among these three elements there are attitudes of positive and negative valences. The assumption is that individuals attempt to resolve attitudes which are not similarly signed, or imbalance. Osgood and Tannenbaum (1955) developed congruity theory to stress the importance of degree as well as direction of a valence. For this research if attitudes toward the traditional role and the career-oriented role have opposite valences the one that is weaker will be more likely to give way to the stronger one. But it is also possible for the valences to be the same in which case balance already exists, or the valences would be of equal strength but in opposite directions. This situation would be most likely to lead to cognitive dissonance and an attempt to reach a balanced state would be postulated to occur in short temporal order. It is the resolution of this conflict that is central to the analysis of career decisions for women according to Falk and Cosby (1975). Gysbers et al. (1968) found that career women are more likely to be single, to have higher levels of educational attainment than are women found in the homemaker group. Since these educational variables are usually associated with social class, Gysbers et al., suggest that a commitment to work may be associated with a family background including high levels of educational attainment.

The final attitudinal conflict delineated by Matthews and Tiedeman is between a female's desired age of marriage and her plans to attend college such that the earlier a female plans to marry the less likely she is to have college aspirations. Bernard has noted that:

> a life style dependent on marriage and the husband's career are features of a woman's contingent life. Depending on the man she marries, a young woman's occupational plans and preparations may be invalidated, modified, or receive the support needed for eventual fulfillment. Lacking control over this event, on which everything seems to hinge, most young women have been understandably reluctant 'to take their future careers seriously' during the premarital years, or even until after the childbearing and rearing phases of marriage (1971:172).

These contingencies are continually changing and differ for various age groups. Women who have children prior to their eighteenth birthday find that their occupational achievement and income are limited by the reduced number of years of schooling they have completed (Borker and Makarushka, 1977).

Stolzenberg and Waite (1977) found a strong linear relationship (r=.96) between a woman's age and the effect labor market participation plans has on her intended fertility plans. This supported their hypothesis that knowledge of the labor market increases with age such that the older a woman is the more likely she is to have lower fertility expectations if she has labor force participation plans. Since the late 1950's the birth rate in the United States has been declining while aspirations of these women has increased in the areas of the quality of their marital relationships and personal fulfillment through increased education, labor force participation, and divorce rates (Schmetz, 1976).

Another area of theoretical importance for the understanding of sex-roles is related to the sex-typed dimension of the occupational hierarchy. Occupations are generally either predominantly female or male, with a few occupations composed of large numbers of both sexes. As was noted before,

> in 1973 more than two-fifths of all women workers were employed in 10 occupations--secretary, retail trade salesworker, bookkeeper, private household worker, elementary school teacher, waitress, typist, cashier, sewer and stitcher, and registered nurse. Each of these occupations employed more than 800, 000 women (U.S. Department of Labor, 1975:91).

One explanation given for occupational segregation is that physical or physiological differences dictate (Zytowski, 1970) but Slocum (1966), Martin and Poston (1972), and Stroker (1976) note that patterns of occupational participation by women are determined largely by culture, often based on role expectations. The occupations in which women are highly concentrated are assumed to be suited to the role expectations of wife-mother, such that they can be easily entered or left, and are characterized by a low technological base which is not rapidly changing. Further these occupations do not involve great physical strength but require interest in and service to people, which are consistent with norms associated with femininity.

Risch and Beymer (1967) attribute occupational segregation to the importance the occupational structure plays as a primary source of need gratification. Some occupations emphasize instrumental function through interest in high standards of achievement, while other occupations fulfill an expressive function by emphasizing standards of gratification. To these authors, an individual's occupational choice is

". . . a function of the role an individual assumes" (88). Accordingly, women enter occupations characterized as expressive.

Epstein (1970b) stated that male predominance in the high-ranking professions and the occupational segregation of females seems to reflect the "second-class" position of women in American society. Even for women who enter traditional male occupations, their positions tend to be less prestigious.

> As long as certain occupations are defined as male, women who seek entry to them will be defined as social deviants and subjected to social sanctions. As a result they will be less often motivated to even consider professions defined as incompatible with women's other roles (Epstein, 1970:165-166).

Astin and Myint's (1971) study showed that typically masculine occupations tend to lose more women than men over time. Gross (1968) noted that segregation in female occupations is decreasing, i.e., males are entering female occupations. But their entry into the female occupations is largely in positions of authority. Traditionally male occupations continue to be resistant to the entry of females. Through his historical analysis Gross found that "when women invade a male occupation they take it over, with the result that there is as much segregation as before, perhaps because the men leave or take over the better jobs . . . however, when men enter a female occupation, the women seem much less likely to leave" (1968:349).

One explanation for Gross' findings is suggested by Broverman et al. (1972) who have found that female sex-role stereotypes emphasize the debasement of females in their abilities, characteristics and potentials. The standard used to evaluate all behavior has traditionally been white and male (Doherty, 1973; Weisstein, 1971; Vetter, 1975). It can therefore be seen, that the socialization process for both males and females establishes the basic idea that is carried through life that women are inferior to men. "To the extent that this form of socialization is successful, women may be prejudiced against other women and thus collude in their own subordination: an ideology is most successful when its victims believe it too" (Ferber and Huber, 1975:749). Therefore, females would rather be supervised by males than other females due to the socialization process that has prejudiced them against other women.

To return to the labor market discrimination, Treiman and Terrell (1975) do not attribute discrimination to the status of work open to women or the qualifications demanded of them. Rather, they attribute the fact that women earn less than men (Suter and Miller, 1973) to the temporary and intermittent nature of the labor market experience of married women. Treiman and Terrell found that women who have never married earn substantially more than women who have ever married due to the former's better education and longer work experience. "The remaining difference in the income of husbands and wives is no doubt due to a combination of direct discrimination against women in the labor market, institutional arrangements that contrain the opportunities of married women and norms that permit (or require) married women to consider the non-income attributes of jobs"(1975:198).

To this point, an attempt has been made to survey those theories relating early socialization experiences to ambition in later life. This ambition takes the form of educational and occupational projections for males. But it has been shown that females undergo ambiguous socialization patterns which provide them with a greater number of contingencies. A woman can decide to work exclusively in the home, or exclusively in a career outside the home or to combine these two options in some manner. The next section of this literature review will survey the empirical research which has been conducted regarding those factors which impinge on the decision of women as to work in or out of the home.

Relevant Empirical Literature

Central to this study is the assumption that there is something distinctive about the career decisions of females, whether they are white or black. If this assumption was not made there would be no reason to separate the career decisions of women from career decisions in general since all people would be assumed to make decisions in the same manner. It appears, from the theoretical notions just discussed that the social roles imposed on women affect their career decisions such that it cannot be assumed that males and females make decisions in the same way. Empirical research isolating sex and race differences in five areas of interest will now be discussed.

Occupational and Educational Projections: Selected Studies on Sex and Race Differences

As was noted earlier, status attainment researchers have studied a variety of aspects of the educational and occupational aspirations and expectations of American males (Sewell, Haller and Portes, 1969; Sewell, Haller and Ohlendorf, 1970; Sewell and Hauser, 1972; Haller and Portes, 1973; Picou and Carter, 1976). But the attainment process for females has been neglected. Prior to the advent of formalized status attainment models, Turner (1964) found that only 4 per cent of high school senior girls planned life-time careers, 48 per cent planned to become homemakers, and the remaining 48 per cent wanted to combine a career with homemaking. Among the career oriented girls there was more stress on their own educational goals rather than material ambition, while these preferences were reversed for girls who were primarily interested in homemaking.

One of the earliest status attainment studies to compare males and females (Sewell and Shah, 1968b) found that of the total sample 21.7 per cent of the males but only 14.5 per cent of the females graduated from college within seven years of their high school graduation. Another early study (Astin, 1968) indicated that twelfth grade girls who were oriented toward college careers could be distinguished from girls who planned to be housewives or office workers as early as ninth grade on the basis of the former's strong interest in mathematics and the physical sciences, the higher socioeconomic status of their families, and their greater interest in the college preparatory curriculum. Vetter (1975:198) notes that in a nationwide study of student career development by Prediger, et al., there were marked sex differences when first occupational preferences were compared. Among 11th graders, over 50 per cent of the girls but only 7 per cent of the boys chose occupations falling in the categories of clerical and secretarial work; education and social services; and nursing and human care. In contrast, nearly half of the boys chose occupations in the technologies and trade cluster while only 7 per cent of the girls chose occupations in this same cluster.

The status attainment process for both males and females has been studied by Alexander and Eckland (1974). They found sex differences when academic self-concept, curriculum enrollment, and the influence of significant others are controlled. But Treiman and Terrell (1975) found that the process of educational and occupational attainment for women is similar to that for males. It has also been found that in comparable ability groupings, males tend to report higher educational aspirations than do females (Epstein and Bronzaft, 1974; Sewell and Shah, 1967, 1968a; Alexander and Eckland, 1974).

Much of the research on occupational aspirations and expectations is characterized by inconsistent findings. Stephenson (1957) found that a higher percentage of females than males aspired to professional categories while opposite findings were reported by Sewell, Haller, and Straus (1957) and Sewell and Orenstein (1965). In contrast to these studies, Harrison (1969) found no differences in occupational aspiration between the sexes.

One explanation for the lack of consistency in these findings is the variety of techniques used to measure level of occupation orientation. Broad classificatory schemes, such as Edwards scale, provide problems in looking at females. While males show wide dispersion in occupational choice, females concentration in a limited number of occupations causes distortion in female occupational orientation and makes it extremely difficult to compare females to males.

The use of more sensitive scales, such as North-Hatt prestige scores by Curry and Picou (1977) resulted in findings that there were no sex differences on either occupational aspiration or expectations. But Olive (1973), using the Bureau of the Census socioeconomic scale of occupations coded from 01 to 99, found that females chose significantly higher occupation than did the males; females--mean score of 77.9, males --mean score 71.1.

Status attainment researchers have found that the model does not fit well for the black male (Porter, 1974; Carter and Picou, 1975; Portes and Wilson, 1976; Kerckhoff and Campbell, 1977). "The occupational status advantage accruing to whites as they obtain additional education is almost four times greater than that accruing to blacks" (Carter and Picou, 1975:32). Coleman et al. (1966) found that black and white students had similar educational and occupational ambitions. But in 1977, Kerckhoff and Campbell noted that on the average, blacks expected to attend vocation schools or a two-year college while whites expected more than two years of college. Black females have been neglected in status attainment research with the exception of Hout and Morgan (1975). They found that mean expectation levels were almost equal for subpopulations, with blacks and males slightly higher than whites and females. Vetter (1975), reporting on the finding of Littig's study of 300 college women, stated that white women were undecided on both their "real" and "ideal" occupational goals more often than the black women. Furthermore, black women's occupational goals, both "real" and "ideal," were significantly more likely to be in non-traditional female occupations than were white women's goals.

Class and Ambition: Selected Studies on Sex and Race Differences

An important variable in level of occupational and educational aspirations is status of origin (Blau and Duncan, 1967; Sewell, Haller and Portes, 1969; Sewell and Hauser, 1972). It appears that educational plans are more closely related to social origin criteria for females and to academic ability for males (Sewell and Shah, 1968a; Alexander and Eckland, 1974). In replicating Sewell and Shah's study, Alexander and Eckland found that the correlation coefficients for status background and ability on educational attainment were .397 and .232, respectively, for the females and .302 and .374 for the males.

Sewell and Shah (1968a) found that socioeconomic status differences in the college plans of males and females were greater among the most intelligent and the most encouraged than among the less intelligent and less encouraged. Among those students with low intelligence and low parental encouragement, only 1.5 per cent of both the low SES males and females planned to go to college, while among high SES students 7.6 per cent of the males and 10.7 per cent of the females planned to attend college. The difference in per cent of males and females in the high SES category who planned to attend college could be an indication of the use of college as a source of mobility through marriage for women (Glen,et al.,1974; Taylor and Glenn,1976). For students with high intelligence and high parental encouragement, 53 per cent of both low SES males and females planned to go to college, while among high SES students 88.4 per cent of the males and 78.6 per cent of the females planned to attend college. Among those students with high intelligence and high parental encouragement the difference between high and low social origins resulted in between 25 and 35 per cent less of the latter planning to attend college. Among the low intelligence and low parental encouragement group the corresponding is only 6 to 9 per cent points difference.

Hout and Morgan (1975), in studying the effect of status-origin variables on educational expectations, found weak or nonexistent direct effects. But for females, direct status effects were observed as a result of parental encouragement. The educational expectations of white females were directly related to father's occupational status. Education of the family head had a similar effect for black females. The findings of Sewell and Shah (1968a), Bayer (1969), Alexander and Eckland (1974), and Hout and Morgan (1975), that the achievements of white females are more dependent on social origins than those of males suggests that female achievement may be more class-based than that of males. This suggests the possibility of a more rigid stratification system being operative for females (Cosby and Picou, 1975).

Studies detailing race variations in educational achievement have been few and limited to males. But most have consistently found that blacks experience difficulty in passing on familial social status advantages to their children (Carter and Picou, 1975).

> Although black Americans may very well be less handicapped in their quest for status attainment by social origins than whites, the liabilities of institutional racism (Ornstein and Rossi, 1970) reveals a social system that consistently (Cosby and Picou, 1975:5-6) at each stage of the life cycle gives blacks a smaller reward than it gives whites for equivalent investments or attainments (Carter and Picou, 1975:37).

Portes and Wilson (1976) found that the correlation between socioeconomic level and educational aspirations was .41 for white males and .08 for black males. Kerckhoff and Campbell (1977) found the correlation between parents' education and ambition, operationalized as educational expectations, to be .461 for white males and .111 for black males. But when mother's education was used as the measure of social origin, the correlation for white males dropped to .404 while the correlation for black males increased to .330 because for black respondents, educational achievements of mothers were higher than those of fathers.

Social class also has an effect on level of occupational orientation for females. A positive relationship between level of occupational aspiration and social class, when controlled for intelligence, was found by Sewell, Haller and Strauss (1957). Harrison (1969), while controlling for social class, found that academically successful females had higher aspirations and expectations than did non-successful students. Further there appears to be no relationship between size of community and level of occupational aspiration when social class and aspirations are controlled (Sewell and Orenstein, 1965). It is the family which provides children with their primary socialization experiences with regard to values, education, work, achievement and independence training (Elder, 1962; Kohn and Schooler, 1969). Hyman (1966) and Kohn and Schooler (1969) have pointed out that class position of one's family is consistently related to adult values which influence adolescent occupational and educational orientations.

Picou and Curry (1973) found that higher occupational aspirations were more likely among females coming from high SES backgrounds. Astin and Myint (1971) found that female high school students who are academically successful and who have aspirations for higher education, most often choose fields that require great career commitment (traditionally male occupations). Therefore, it appears that attainment status of parents influences their daughters' expectations for attainment.

Achievement Motivation and Ambition: Selected Studies on Sex and Race Differences

Achievement motivation is another area believed to impact greatly on aspirations and expectations. Though there are few empirical studies which have tested this theory using women, there are several findings relating to childrearing patterns which are useful for this thesis. Rosen and D'Andrade (1959) found that high achievement orientation is created less by early independence training than by direct transmission of achievement values by parents, whether these occur in the form of rewards and punishment for achievement or in the form of a positive role model for achievement. Winterbottom (cited in McClelland, 1961) attributed a strong need for achievement in boys, at least partially, to a mother who demonstrates warmth, affection, and emotional involvement in good performance. McClelland (1961), in generalizing from a number of findings, concluded that excessive demands on a child can lead to low levels of achievement motivation. With regard to the role of the father, Rosen and D'Andrade (1959) found that achievement motivation was highest in males whose fathers had given them a great deal of autonomy. Rehberg et al., (1970) found evidence that supports the previous findings that non-democratic parental socialization patterns are negatively correlated with adolescent achievement levels for males.

The highest levels of achievement motivation are found among the middle class (Rosen, 1956) and more specifically among the sons of entrepreneurs (Turner, 1970). Blacks have been found to have lower levels of achievement motivation than whites (Rosen, 1959). But lower class males are often found to be highly motivated (Scanzoni, 1967). For this group it is achievement motivation which is most predictive of eventual occupational attainment (Elder, 1968).

For those studies which have applied McClelland's method of assessing achievement motivation to females, females' scores on the motivation measures did not correlate with their actual achievement (Alper, 1974; Maccoby and Jacklin, 1974). Horner (1972) developed the idea of a motive to avoid success in order to explain the sex differences found in prior achievement motivation work. This motive to avoid success arises out of the conflict situation women find themselves in, namely the expectations they feel to do well in school while feeling it is unladylike to do better than men at any task. Her tests of the theory resulted in findings that women do inhibit their achievement, particularly in situations considered to be competitive with men. Weston and Mednick (1970) used a sample of black and white college women to test the hypothesis that black women fear success less based on an assumption that black women are an economic asset in their subculture and are viewed as less of a threat by black men. Their hypothesis was confirmed.

Though Horner's work has been severely criticized, it has generated much research involving alteration of the cues. Alper (1974) noted that the percentage of women expressing fear of success dropped drastically when the cue involved a woman being successful in a traditional female area rather than a non-traditional one. Katz (1973) found that males expressed increased avoidance of female success when the cue was changed from an equally male and female school to an all-male school.

Female achievement is also assumed to be based on needs for affiliation. But Maccoby and Jacklin (1974) note that this does not appear to be substantiated by the studies they reviewed. Further, it was concluded on the basis of their thorough review of empirical studies that females were no more responsive to social reinforcement (p. 149) or more person oriented (p. 211) than males.

It appears that cultural restriction placed on female achievement mediate achievement and explain sex differences in achievement motivation. Both sexes view direct female achievement as inappropriate. Turner (1964) found that ambitious females who planned a career as a homemaker expressed their life goals in terms of their prospective husbands' achievements. The inappropriateness of direct female achievement is further supported by Maccoby and Jacklin's (1974) finding that both males and females show less achievement imagery when the cue is a picture of a female. The type of achievement is affected by sex roles such that creative and intelligent people are more likely to be androgynous than those people who identify strongly with sex-role stereotypes (Bem, 1974; 1975).

Women do not seem to lack a need for achievement. Rather, women express their achievement needs differently than men. Turner (1964) noted the importance of understanding that women can express their ambition both directly through occupational goals and indirectly through marriage goals. These two goals are not mutually exclusive. In fact Epstein and Bronzaft (1972) found in their study of college women that the predominant expectation was a combination of marriage, children and a career. Marriage plans play a crucial role in the development of career plans. Early plans for marriage, early marriage (Bayer, 1969), marriage (Almquist and Angrist, 1970), and early and large families (Klemmack and Edwards, 1973) all act to depress females' career expectations and attainment.

SOI and Ambition: Selected Studies on Sex and Race Differences

The influences of significant others (SOI) has been shown to affect achievement motivation (Rosen and D'Andrade, 1959; McClelland, 1961). More specifically parental expectations are an important influence on expectations. Picou and Howard (1976) found that boys receive more encouragement to go to college and more encouragement from parents, teachers, and friends to pursue career aspirations. Parental encouragement is important to college plans, especially for females. Sewell and Shah (1968a) found that it explained 14.0 per cent of the variance in college plans for boys and 15.5 per cent of the variance in college plans for girls. But they also found that women receive less encouragement from parents and teachers than do men.

When racial comparisons are made, significant other influences are less strongly correlated with occupational choice for black males (Porter, 1974) and black females (Picou and Curry, 1973). Hout and Morgan (1975), in carrying out detailed sex-race comparisons, found several interactions. Parental encouragement for educational attainment is strong across all four sex-race groups, but slightly higher for males than for females and strongest for black males. In contrast peer influence on educational expectation (r=.389) is approximately equal for white males and black females, slightly lower for white females, and virtually nonexistent for black males. For occupational expectation, a reversal of the previous racial ordering for educational expectations was found. Peer influence is greatest for black females, about equal for black and white males, and nearly nonexistent for white females. These large differences between white females and black females seem to indicate that "black females are more concerned than white females with future occupational prestige and are more career oriented in their conception of the adult feminine role" (Hout and Morgan, 1975:387). Parental encouragement for occupational expectations is larger for males than females and greatest for the black males. But this encouragement has four times larger effect on males than females indicating parents' "greater concern for the occupational placement of their sons than of their daughters" (Hout and Morgan, 1975:387).

Family Structure and Ambition: Selected Studies on Sex and Race Differences

The importance of family variables such as social class, parental education and occupation, and parental encouragement have been shown to contribute to educational and occupational ambition. More specifically, certain components of family structure influencing ambition will now be discussed.

A moderate negative correlation (ranging from -.20 to -.30) has been found between family size and educational achievement in a variety of countries (Clignet, 1974:50) and more specifically within the United States (Blau and Duncan, 1967:298). But the negative effect of family size on educational achievement varies on the basis of the child's ordinal position in the family. Only children, oldest children and youngest children show little differences in the status they attain when compared with the differences in status between children coming from small families. Blau and Duncan (1967) found that it was the higher levels of education attained by children in the extreme positions which gave them the increased status. Althus (1975) found that first born and only children are over represented among college students.

Larger family size reduces status mobility since financial resources to increase educational attainment must be divided among more children. Social class plays a role in this relationship since lower class families tend to be the largest in industrialized countries (Clignet, 1974; Uhlenberg, 1972). Therefore, it is more difficult for the lower class child with ability and ambition to obtain funds to continue education beyond high school both because their family's income is lower and there are more children to share it.

For females, it has also been found that number of siblings has a strong negative effect on educational expectations (Hout and Morgan, 1975). This negative effect is intensified if the female comes from a large family with many boys, or a smaller family with some boys and low income. Among these two groups, traditional sex-role orientations stress the importance of education for the occupational advantage of males while it is considered to be a "waste" for females since they will marry anyway (Epstein, 1970a:62). In birth order research, it has been hypothesized that being first born leads to differential socialization between the first born and later born such that the former are more likely to assume traditionally defined roles or are the conservators of tradition (Clignet, 1974). For females this would result in first born women aspiring more often to the housewife role. But Edwards and Klemmack (1973) found first born females no more likely to aspire to the housewife role than females born in any other ordinal position. Further, those first born females who aspire to outside the home careers are more likely to aspire to nontraditional female occupations than are later born females.

Mother's employment is another family characteristic of importance for the development of female aspirations and attainments. Almquist and Angrist (1970) found that having a working mother increases a female's aspirations and is helpful in the development of a career orientation. This is further substantiated by findings showing that daughters of working mothers are more likely to approve of working mothers, to have higher evaluations of women's abilities, and to have less traditional sex role concepts (Hoffman, 1974; Broverman et al., 1972). Perhaps the working mothers of white girls, provide them with a positive image of women as doers rather than an image as passive and dependent persons just as black women have done for black girls (Epstein, 1973:919).

Fogarty et al. (1971) found that women who are more career-oriented or who choose more non-traditional occupations feel more similar to their fathers than their mothers. Other studies have noted the negative quality of the relationship between career-oriented non-traditional women and their parents (Almquist and Angrist, 1970; Lipman-Blumen, 1972). While these findings appear contradictory, Tangri (1972:182-3) showed that women who choose non-traditional occupations have warmer relationships with their mothers than their fathers, but feel more similar to their fathers, while maintaining an autonomous relationship with both their parents.

As was noted in the section on achievement motivation and ambition, there are certain forms of socialization that are more highly correlated with educational and occupational attainment. Testing Rosen's 1962 conceptualization of achievement and independence training, Rehberg et al. (1970) found that for males, educational expectations were dependent on achievement training socialization practices but not on independence practices. Further they found that while patterns of authority do not differ between social classes, a "democratic" authority pattern between parents and son is more conducive to educational achievement than is an "autocratic" authority pattern. Comparative tests have not been made with blacks or women so that it is not possible to generalize from this study to other sex and race groups.

Another variable thought to be of significance in understanding ambition is the dissolution of a marriage by death, divorce or separation. A disrupted marriage reduces the educational attainment of the children which is then translated into a poorer average occupational achievement (Blau and Duncan, 1967:336). When a home is broken by divorce or separation the mother usually maintains the familial role for the children. But economic support is not as readily available as it was before the break often meaning that these women must go to work outside the home. Maternal employment is often believed to lead to juvenile delinquency but it has been refuted as the determining factor (U.S. Department of Labor, 1972). But maternal employment has been associated with increased ambition among females as was noted above. The specific implications of this empirical pattern are yet unclear due to the mixed findings of previous studies.

Conceptual Approach of this Study

Introduction

In this section an attempt is made to specify and clarify the major analytical concepts used in this thesis. A conceptual framework, tying together the theoretical and empirical work cited thus far, will be developed. This framework will serve to facilitate the logical derivation of the propositions and hypotheses.

Major Concepts

Aspiration and expectation. It is in studies of occupational choice that these two concepts have been used most often. As noted by Falk (1975), there has been an attempt to differentiate between expectations and aspirations on a conceptual and analytical level (Kuvlesky and Bealer, 1966; Rehberg, 1967; Picou and Campbell, 1975). While Haller (1968) conceptualized expectation to refer only to alter's expectations for ego, the acceptance of Kuvlesky and Bealer's (1966) conceptualization by numerous researchers and its usefulness for this research have led to its use in this paper.

For Kuvlesky and Bealer an aspiration is defined as "a person's or grouping of persons' orientation toward a goal" (1966:269). Therefore, it is an idealized conception of what a person or persons would like to achieve which reflects the success-orientation of American society. In contradistinction, an expectation is "the individual's estimation of his probable attainment in reference to a particular goal area, i.e., what occupational position he expects to reach" (Kuvlesky and Bealer, 1966:273). It seems that an expectation is a reflection of those environmental and individual factors which may act as goal-impediments. It, therefore, provides a more realistic appraisal of what is probably attainable.

As has been noted throughout the literature review, the male standard predominates such that aspirations would most likely reflect goals only realistic to white middle class males. While assuming that status attainment takes place largely through the socialization process, certain allocation features are pointed up by comparisons of race and sex which are to be undertaken. While "everyone wants the same outcomes, . . . people at different levels of the stratification system quite understandably expect different outcomes (Kerckhoff, 1976:371). Therefore, educational and occupational expectations will be used as the dependent variables, since they are viewed as reflecting the realistic limitations on educational and occupational attainment internalized by females and blacks through the socialization process.

Socialization. This concept can be conceptualized in two broad manners. Wrong perhaps provides the most parsimonious delineation of the difference in stating that "on the one hand socialization means the 'transmission of culture', the particular culture of the society an individual enters at birth, on the other hand the term is used to mean the 'process of becoming human', of acquiring uniquely human attributes from interaction with others" (1961:193). Anthropologists would term the former enculturation and the latter socialization (see Williams, 1972:1). For the purposes of this thesis the emphasis will be on the former since the area of study is the transmission of cultural beliefs and attitudes relating to the potential of blacks and females in American society.

Sex-role. One of the most serious problems with the use of the term sex-role is that it has many colloquial meanings firmly fixed in its general usage. The easiest to exclude from consideration due to the purposes of this research is its use to refer to an individual's sexual behavior. As it is used in this paper, this concept follows Pleck's conceptualization of sex roles "to refer to the psychological traits and the social responsibilities that individuals have, and feel are appropriate for them, because they are male or female" (1976:182). It can therefore, be seen that analytically and empirically there are two aspects of sex roles which can and need to be distinguished.

Differing personality traits for males and females are exemplified in the characterization of males as active, aggressive, and competitive, while female roles characterized females as passive, nurturant, and altruistic. The second aspect of sex roles deals with the normative aspects of adult responsibilities largely centered around the family. The female role stresses the familial tasks of women and the secondary importance of employment. The male role stresses the economic importance of the male's job and with it limitations on what is acceptable as far as housework and child care are concerned. It has been thought that there is a causal relationship between these two aspects of sex roles such that certain personality characteristics fit males and females to their different adult socialization responsibilities. This is an assumption (Pleck, 1976:183) which will be analyzed in this thesis.

To further complicate matters the use of the term sex roles suggests the existence of only two roles, one male and one female (Chafetz, 1974:34-37; Stoll, 1974:78; Bem, 1974:155). However, much evidence suggests that personality traits of males and females cannot be conceived of as polar extremes (Bem, 1974, 1975). In fact, Chafetz reported the results of a study which asked college students to list those characteristics used by most Americans to characterize males and females. Those characteristics mentioned most often which had counterparts for both sexes were found to fit into overlapping normal curves (Chafetz, 1974:37). These findings suggest that differences within one group are larger than the mean difference between the two groups.

Though this evidence is of interest, it is necessary to remember that in terms of the person on the street, males and females have many personality traits believed to be at polar extremes. Since our sample is composed of high school age males and females, it will be necessary to assess the levels of several empirically evident personality traits to see if they differentiate between males and females, especially when controls for race are applied. If such differences are isolated, [illegible] influence on the aspirations and expectations of adult social responsibility can be assessed.

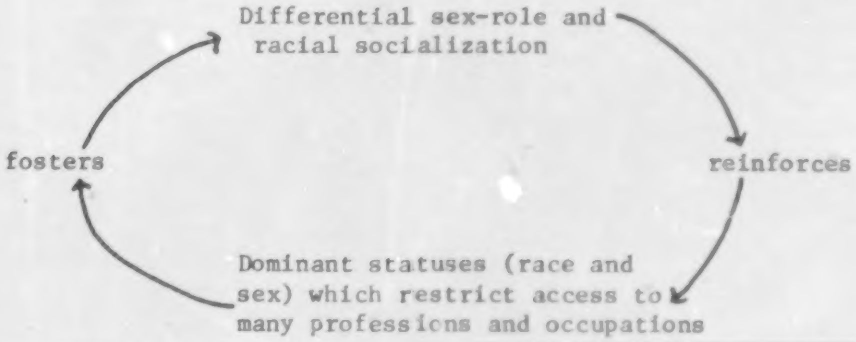
Achievement motivation. There has always been interest in why some societies are more successful at instilling in their members a desire to accomplish feats. Max Weber suggested that it was Protestantism which had instilled in people a motivation to work hard and live a simple life that led to the rise of capitalism. Among American values there has always been an orientation toward the values of achievement and success (Williams, 1960; Merton, 1968). But, it was the seminal work of McClelland et al. (1953) that opened up achievement motivation, or the desire to excel in accordance with standards of excellence, to empirical research. Prior to that, there had been no way to measure achievement motivation other than through behavior, but the development of the Thematic Apperception Test (TAT) made this possible. Rosen and D'Andrade (1959) describe achievement as composed of the psychological factor of achievement motivation, which provides the internal impetus, and the value orientation as the cultural factor providing for the level of aspiration. Achievement motivation has been found to vary with social class (Rosen, 1956), ethnicity (Rosen, 1959), birth order (Sampson, 1963), family size (Rosen, 1961), educational achievement (Elder, 1965), occupational aspirations (Elder, 1962, 1968), and access to entrepreneurial environment (Turner, 1970).

One major problem with these studies is that they have been limited to male samples. Those studies undertaken which include females have found inconsistent results. One thesis to explain these discrepencies has received great attention. This is the work of Matina Horner (1970, 1971), who found that women fear the negative consequences that result from success in an intellectual task. But numerous criticisms have been leveled against Horner and all researchers in the area of achievement motivation for conceptualizing achievement or success in masculine terms (Katz, 1973; Stoll, 1974). Stoll states that "achievement is defined narrowly to mean success in the school and work world, while logically it should include interpersonal success and excellence in areas not rewarded publicly" (1974:81). In this thesis, achievement motivation will be primarily used to refer to academic and occupational success. But it will be understood that achievement motivation can be applied to those women who define success in terms of their future husbands and families.

Ambition. This concept has been used ambiguously in various status attainment studies. Educational and occupational expectations have been used as indicators of an unmeasured variable ambition (Duncan et al., 1968; Porter, 1974). It has also been operationalized as educational expectations (Kerckhoff and Campbell, 1977). For the purposes of this thesis, ambition will be used to refer to educational and occupational expectations.

Conceptual Framework

In surveying the empirical and theoretical literature, it becomes apparent that any attempt to assess differences in educational and occupational expectations among males and females, whether black or white, must be made with reference to role theory. While recognizing the controversy in the use of the concept role (see note 4), all theorists agree on the importance of the idea of role as "prescriptions for interpersonal behavior associated with socially recognized categories of persons. Such categories are referred to as statuses or positions" (Heiss, 1976:3). An individual internalizes the roles associated with a particular status through socialization. But it has been noted that there are certain statuses, e.g., race and sex, which are dominant in that they restrict the other statuses which one is likely to acquire (Epstein, 1970b, 1973). Expressed another way, being black and being a woman are "master status-determining traits" (Hughes, 1945) in that they overpower other statuses in many crucial situations. Therefore, there is a self-perpetuating cycle reducing the achievements of blacks and women which contains a personal element and a structural element. This cycle is graphically depicted below:


Differential sex-role and racial socialization
reinforces
Dominant statuses (race and sex) which restrict access to many professions and occupations
fosters

It is the differential socialization patterns with regard to educational and occupational expectations which are the concern of this thesis. But the fact that these two dominant statuses often restrict access to many professions and occupations cannot be totally ignored since the norms associated with these dominant statuses are internalized through socialization. Though race and sex cannot be separated in reality, for the sake of this conceptual framework, it will be necessary to analytically discuss the two separately. Sex-role socialization will be discussed and then attempts to differentiate between blacks and whites will be made.

The sex role socialization process is intertwined with all stages of the life cycle. During infancy there are distinctions in the color and appropriateness of clothes. As the child grows, toys are bought on the basis of his or her sex. Television and pre-school books provide children with stereotypical sex roles which they carry with them to school. Beginning with the early years of school, play activities and assembly lines are segregated by sex; and boys are expected to prepare for their later roles by moving furniture and carrying books while girls serve cookies and punch at the school parties (Chafetz, 1974). Further, children's books are heavily biased against girls and women so that at the same time children learn their three R's they also learn that girls are not very important since no one bothers to write about them (Weitzman et al., 1972). These practices continue through high school and other practices such as "sexregated" required courses (cooking, sewing, and typing for girls, and shop for boys) are added.

These and other sex-role practices have been shown to result in sex-role stereotypes which reflect ethnocentric debasement of the female, her characteristics, abilities and potentials (Broverman et al., 1972; Chafetz, 1974; Albrecht et al., 1977). Regardless of sex, socio-economic class or religion of respondent, it was found that:

> women are perceived as relatively less competent, less independent, less objective, and less logical than men; men are perceived as lacking interpersonal sensitivity, warmth, and expressiveness in comparison to women. Moreover, stereotypically masculine traits are more often perceived to be desirable than are stereotypically feminine characteristics (Broverman et al., 1972).

Therefore, the normative evaluations are based on a male standard which states that the prototype of humanity is a white male (Doherty, 1973; Vetter, 1975).

Further, there is a cultural mandate in American society which prescribes the primary allegiance of women to their familial roles and that of men to the providing of economic support and social status (Coser and Rokoff, 1971). Maccoby and Jacklin (1974) note that it is the period of late adolescence, with its emphasis on dating and marriage, when individuals are most likely to define themselves in terms of their sex so that greater sex differences may show up at this time than at any other. This led to the statement of the following proposition and hypotheses:

PROPOSITION I: One's sex will influence the stereotypical sex-appropriate behaviors chosen.

Hypothesis 1: Females will express more interest in social activities than males.

Hypothesis 2: Males will express more interest in competitive activities than females.

Hypothesis 3: Males will be more likely to be interested in challenging situations while females will prefer to complete tasks they have been successful at before.

Though the familial role is stressed as primary for the female, work outside the home has been given a secondary role. But female occupational roles are distinct from those of males such that the existence of a sex-linked occupational structure has been pointed out in a number of studies (Coser and Rokoff, 1971; Martin and Poston, 1972; Gross, 1968; Knudson, 1969). Their jobs are not meant to give them prestige but rather to help men in their achievements by taking jobs to help their husbands through school or to help their children to go to college, or provide extra money for themselves or others (Coser and Rokoff, 1971).

For white females increased education is seen as a means by which to maintain or advance status through the selection of an appropriate husband (Glenn et al., 1974; Rubin, 1968) as well as a source of career development. This dual use of further education reduces their occupational expectations. Discriminatory practices have shown the black female that even high levels of educational attainment do not guarantee a black man occupational success (Epstein, 1973). Therefore, black females continue their education in order to be able to improve their occupational advancement rather than merely to find a husband. Thus the proposition and hypotheses to be tested here are:

PROPOSITION II: Educational expectations will be related to occupational expectations.

Hypothesis 4: The higher the educational expectations the higher the occupational expectations.

Hypothesis 5: The relationship between educational expectations and occupational expectations will be stronger for males than females.

Hypothesis 6: The relationship between educational expectations and occupational expectations will be stronger for black females than white females.

Several questions arise as to the role of social structural characteristics for sex-role and racial socialization. Several studies have demonstrated that social origins are more important predictors of white females' than white males' educational achievement (Sewell and Shah, 1967; Alexander and Eckland, 1974). These results, added to the findings that academic achievement is more important in predicting the educational achievement of males, suggest that there is a more rigid stratification system operating for females than males (Cosby and Picou, 1975). This is further substantiated by findings that suggest that lower class parents discriminate between the sexes while middle and upper class families have greater resources to support female achievement and are less likely to emphasize achievement patterns that reflect traditional sex-role variations (Kohn, 1959; Sneider and Smith, 1974). With regard to blacks, it has been shown that they operate under a less rigid stratification system than whites (Carter and Picou, 1975). Further, as has been noted before, black women do not seem to idealize men as white women do, and sex discrimination does not exist in the black family as it does in the white family. It appears that women in black families hold significantly more power in relation to their men than do white women (Mason and Bumpass, 1975). The following proposition and hypotheses are suggested:

PROPOSITION III: Social origins influence educational and occupational expectations differently by race and sex group.

Hypothesis 7: Social origins (father's and mother's educational and occupational achievements) will more strongly affect the educational and occupational expectations of white females than white males.

Hypothesis 8: Social origins will have no different affect on the educational and occupational expectations of black males and black females.

Hypothesis 9: Social origins will more strongly affect the educational and occupational expectations of whites than blacks (whether male or female).

Regardless of social class, studies showing that females limit their occupational choice at an early age are numerous (Prediger et al., 1973; Siegal, 1973; Schlossberg and Goodman, 1972). While this indicates that sex-role socialization has been effective, the converse or the ineffectiveness of sex-role socialization has also been demonstrated since varying proportions of females aspire to and fill positions in nontraditional occupations (Astin, 1968; Cybers et al., 1968; Turner, 1964; Epstein, 1970b; 1973). The aspiration of black females to nontraditional occupations has been noted by Vetter (1975). The question then arises as to why all females are not effectively socialized into their traditional positions of wife and mother?

One possible explanation is that the socialization of females in American society is described as ambivalent (Bardwick and Douvan, 1971; Epstein, 1970a). Until they reach puberty, females are rewarded for certain achievement behavior, particularly academic achievement, much the same as males are. But with the onset of puberty, proscriptions for the female role become salient. There is an increasing emphasis on being noncompetitive in areas which have now been defined as within the male sphere. Competition and achievement are seen as detrimental to the development of love relationships which are becoming important during this period (Bardwick and Douvan, 1971). This can cause a dilemma since early familial socialization practices, such as independence training, achievement socialization, and the family authority structure, can supersede the proscriptions learned during adolescence.

Rehberg et al. (1970) found that high levels of educational expectation are associated with democratic parent-child relationships and achievement training practices but not independence practices. This research was restricted to white males but these same associations can be tested in this thesis since the same variables are to be found in both studies. The assumption cannot be made that parents will socialize sons and daughters with the same orientation toward achievement or independence or that the same type of authority will be used for sons and daughters. These socialization patterns are influenced by the expectations of parents for their daughters. Since white families cons[illegible] the familial role to be primary, the importance of achievement training or independence should not be as great for females. Further, since the lower class family tends to view authority as expressed traditionally through the male, autocratic patterns should be greater for the female. Among black families, it has been shown that career-oriented and working women are not seen as a threat to the status quo (Epstein, 1973; Axelson, 1970). Their success is seen as necessary in the economically disadvantaged state of the black lower class family so that achievement and independence practices should be similar for males and females. Thus the following proposition and hypotheses follow:

PROPOSITION IV: Parental achievement training patterns will influence educational expectations.

Hypothesis 10: Parental achievement training practices will be greater for white males than white females.

Hypothesis 11: There will be no differences in achievement training practices for black males and black females.

Hypothesis 12: Parental achievement training will be positively associated with educational expectations.

While independence training has not been empirically tied to career expectation, white females whose parents have emphasized independence would most likely have less traditional educational and occupational expectation since it runs counter to the affilial stereotype of female behavior. Therefore:

PROPOSITION V: Parental independence training practices will be influenced by sex and race of respondent.

Hypothesis 13: There will be no difference in level of educational and occupational expectations for different levels of independence training for males and black females.

Hypothesis 14: For white females, the level of educational and occupational expectations will increase as independence training practices increase.

The following proposition and hypotheses are derived from earlier research concerning the influences of family authority relationships on educational expectations (Rehberg et al., 1970). The same relationships should hold for occupational expectations.

PROPOSITION VI: Parent-child authority relationships will be influenced by race and sex of the respondent.

Hypothesis 15: "Autocratic" parent-child relationships will be greater for white females than white males.

Hypothesis 16: Parent-child authority relationships will not differ for black males and black females.

Hypothesis 17: Parent-child authority relationships will not differ by levels of social origins among white males and blacks.

Hypothesis 18: "Autocratic" parent-child relationships will be greater among low social origin white females than among high social origin white females.

Hypothesis 19: The level of educational and occupational expectations will be higher for respondents reporting a "democratic" parent-child authority relationship than for respondents reporting an "autocratic" relationship.

Another possible explanation for the failure of many females to be socialized into their traditional positions as wife and mother, is that the maternal role model does not fulfill this traditional pattern. As has been noted before, adolescence is a stage when sex is situationally important. Therefore, the likelihood of same sex modeling is greater (Maccoby and Jacklin, 1974). Numerous researchers (Almquist and Angrist, 1970; Broverman et al., 1972) have shown that maternal employment increases the expectations of females. The image of woman as "doer" (Epstein, 1973) contradicts the sex-role stereotype of the passive woman leading to "parental identification" which over-rules "sex-role identification." But among lower class whites, maternal employment is restricted by traditional sex segregation so that the familial primacy is stress. The following proposition and hypotheses are derived from the former discussion:

PROPOSITION VII: Maternal employment will influence educational and occupational expectations differently by race, sex, and social origins.

Hypothesis 20: Maternal employment will increase educational and occupational expectations of females more than that of males.

Hypothesis 21: Maternal employment will increase educational and occupational expectations of high social origin white females more than it will low social origin white females.

Hypothesis 22: Maternal employment will have no different affect on the educational and occupational expectations of low and high social origin black females.

Closely tied to this second explanation is a third--the nature of the parental relationship, i.e., family intact or not intact. In father-absent homes it is more likely that the mother will have to enter the labor force in order to provide economic support for the family. Middle-class daughters will be provided with a "doer" role model thereby increasing their own expectations. But among lower-class families broken homes do not result in total loss of adult males since wide kinship associations are maintained. This would seem to indicate that the lower class mother in a broken family will not provide their daughters with a "doer" role model. Thus, the following proposition and hypotheses can be developed:

PROPOSITION VIII: The intactness of the family will influence educational and occupational expectations.

Hypothesis 23: High social origin females' (whether black or white) educational and occupational expectations will be greater when the family structure is not intact.

Hypothesis 24: Among low social origin females (whether black or white), no difference in educational and occupational expectations will be found for those who come from intact versus not-intact families.

Hypothesis 25: No difference in educational and occupational expectations of males (black or white) will be found between those coming from intact versus not-intact families.

Hypothesis 26: Among females from not-intact families, educational and occupational expectations will be greater for those females who have working mothers than for females who do not have working mothers.

Another contingency which has been suggested as a limiting factor on educational and occupational expectations for females is marriage and fertility plans. Since the familial role of homemaker has traditionally been associated with the female sex, it is assumed from an early age that a female child will spend the majority of her adult life fulfilling the role obligations of wife, mother and homemaker. It has been empirically found that the lower the marriage age and the higher the expected fertility level the less likely a woman is to pursue higher education or a career (Borker and Makarushka, 1977; Stolzenberg and Waite, 1977). Since marriage and fertility plans are only associated with the traditional familial role of males in terms of the providing of economic support, they are unlikely to affect educational and occupational expectations. For the black female, marriage does not put an end to employment in the work force (Epstein, 1973). Therefore, this proposition and these hypotheses follow:

PROPOSITION IX: Marital and fertility plans will have varying influences on educational and occupational expectations for different race and sex groups.

Hypothesis 27: For white females, plans to marry and fertility expectations will vary inversely with educational and occupational expectations.

Hypothesis 28: Age of planned marriage will be positively related to educational and occupational expectations for white females.

Hypothesis 29: Marital and fertility plans will not be related to educational and occupational expectations for males and black females.

Notes

1. Several other studies that found similar methods of socialization for the young into their culture are Dubois, 1941 and Gardner, 1966. Williams' development of socialization into Pagago society is drawn from his own studies (1958) and the ethnographic reports of Underhill (1934-1946) and Costetter. See Williams (1972) for reference to these studies.

2. This theory was derived by Williams (1972) from Margaret Mead's "The Concept of Culture and the Psychosomatic Approach." Pp. 594-622 in D. G. Haring (ed.), Personal Character and the Cultural Milieu. Syracuse, New York: Syracuse University Press.

3. Role has been used in several ways in the social sciences. Meadian role theory stresses the importance of symbolic social interaction as a requirement to turn humans into social beings. The emphasis is on the process of "taking the role of the other." The structural study of roles is based on the works of Ralph Linton. Structural role theory is primarily interested in questions of content, organization and consequences such that the normative elements of a role are stressed. Status has been used to indicate both the reciprocal normative expectations placed on people by certain positions and to the hierarchical nature of power, authority, and prestige in any social system. These confusions cannot and should not be resolved in this thesis, but the general consensual elements of the varying perspectives will be used in this thesis.

4. With the move from the Meadian conception of role to the Parsonian or structural conception of role, the underlying nature of role theory has changed (Turner, 1962). Put succinctly "originally such theory depicted an explanatory and creative interaction process, one marked by fluidity and, often, by some measure of innovation. This theory, however, has increasingly come to be employed as a refinement of conformity, or social control, theory" (Meltzer and Petras, 1972: 52).

5. Much of the comparative and psychological work is very technical, particularly in its use of medical terminology. For a brief, relatively objective review of these studies see Rosenberg and Sutton-Smith (1972). Further, Weisstein (1971) notes that researchers who work with primates tend to ignore many species that exhibit behavior that conflicts with their theories.

6. Anticipatory socialization involves "the acquisition of values and orientations found in statuses and groups in which one is not yet engaged but which one is likely to enter" (Merton, 1968:438).

7. See Schneider and Smith (1973:84-5) for further distinctions among these groups.

CHAPTER III

METHODOLOGICAL PROCEDURES

Introduction

This chapter describes the procedures utilized in this research. Included is a description of the data utilized, the key variables of the study and their operationalization. This chapter culminates with a description of the statistical techniques used to test the hypotheses.

Description of the Data

The data employed in this thesis were drawn from a larger data set on mobility and achievement orientation among Louisiana high school seniors in the fall of 1970. The original sample was chosen through the use of a proportionate, stratified, random cluster technique. All high schools in Louisiana were stratified with reference to four primary demographic traits: (1) residence of school (urban-rural), (2) size of senior class (less than 100, 100-500, over 500), (3) race (black-white), and (4) school type (public-parochial). The sampling frame included all public schools and private schools regardless of racial exclusiveness.

Questionnaires were administered to all senior class members who were in attendance on the pre-scheduled interview days. Checks with school officials suggested that the absence rates were normal. A total of 3,245 respondents comprised the final sample of which 1,175 were white males, 287 were black males, 1,168 were white females, and 390 were black females. All of the questionnaire items were not originally coded. For the purposes of the thesis, this writer undertook a second coding to accumulate data on mother's occupation and marital and fertility plans. (For further details on the sample, see Picou, 1971). At the time of this coding, 405 questionnaires were missing. With these missing questionnaires and non-responses on other questionnaires, the items concerning mother's occupation and marital and fertility expectations had as high as 23.8 per cent missing data. Only those persons on which there was complete information are included in the analysis data set. This resulted in a sample size of 2,170. A comparison of the analysis data set and the original data set indicated that by using the smaller sample no systematic bias was introduced on the background variables of race, sex, parents' marital status, parents' education, or place of residence (see Appendix B for elaboration of this analysis).

Operationalization of Variables[1]

The variables utilized in this thesis can be classified into three major categories: (1) social structure or exogenous variables (2) interpersonal or intervening variables, and (3) dependent variables. Operationalization of several variables was undertaken in more than one manner in order to be suitable for the analytic procedures. Dichotomies were formed using both substantive and numerical means (Davis, 1971).[2] Where more than one form of operationalization was used,both will be presented in the following descriptions. The indicators of social structure were operationalized as follows:

Father's Education: determined by respondents' report of highest grade in school completed by their fathers. The possible response alternatives for this variable ranged from 0=no formal schooling to 20=professional degree, Ph.D., M.D., D.D.M., etc. For the contingency table analysis, father's education was dichotomized into less than twelfth grade and twelfth grade or more.

Table 1. Father's Education

Educational Level	White Female N	White Female %	White Male N	White Male %	Black Female N	Black Female %	Black Male N	Black Male %
Less than 12th grade	312	35.8	292	34.9	229	80.6	148	82.7
12th grade or more	559	64.2	544	65.1	55	19.4	31	17.3

It appears that there are only small differences in father's education between the sexes within each racial group, but as would be expected, substantial differences between the two racial groups. Over 60 per cent of the white males and females have fathers with a twelfth grade education or more, while more than 80 per cent of the black males and females have fathers with less than a twelfth grade education.

Mother's Education: operationalized identically to "Father's Education."

Table 2. Mother's Education

Educational Level	White N	Female %	White N	Male %	Black N	Female %	Black N	Male %
Less than 12th grade	358	41.1	333	39.8	231	81.3	142	79.3
12th grade or more	513	58.9	503	60.2	53	18.7	37	20.7

As with father's education, the racial differences are substantial in level of mother's education. About 60 per cent of the whites had mothers with at least a twelfth grade education, but only about 20 per cent of the blacks had mothers with the same level of education.

Father's Occupation: was previously coded by applying "Duncan SEI transformed to NORC Prestige scale scores" to the occupation, industry and class of work that the respondent reported to be held by his/her father (Duncan, 1961:109-138). The last job the father held was coded in cases where the father was unemployed or deceased. For the contingency table analysis, father's occupation was dichotomized into low and high occupational prestige with the division in categories taking place between 65 and 66 in order to maximize the variation without selecting a point where a shift of one or two numbers would cause drastic variation in the frequencies in each category.

Table 3. Father's Occupation

Occupational Level	White N	Female %	White N	Male %	Black N	Female %	Black N	Male %
Low	348	40.0	332	39.7	261	91.9	158	88.3
High	523	60.0	504	60.3	23	8.1	21	11.7

The concentration of blacks and whites into levels of father's occupation is markedly different. White females and males indicated that their fathers worked in high level occupations 60 per cent of the time, whereas only 10 per cent of the black females and males indicated that their fathers had high level occupations.

Mother's Occupation: This variable was operationalized in terms of five broad categories:

1 = works at home

2 = works at low-skill blue collar

3 = works at high-skill blue collar (operatives or nondomestic service workers)

4 = works at clerical or sales white collar

5 = works at professional white collar (professionals, managers, officials, teachers)

Since no data indicating the reason for the respondent's mother's working was collected,[3] this variable was operationalized for contingency table analysis into a dichotomy indicating whether or not the respondent's mother is employed outside the home.

Table 4. Mother's Occupation

Occupational Level	White Female N	White Female %	White Male N	White Male %	Black Female N	Black Female %	Black Male N	Black Male %
Housewife	509	58.4	491	58.7	179	63.0	110	61.5
Employed Outside Home	362	41.6	345	41.3	105	37.0	69	38.5

There is little difference (less than 5 per cent) between the four subgroups on maternal employment. About 40 per cent of respondents in all control groups indicated that their mothers were employed outside the home.

Intactness of Family: Parental marital status was the question used to operationalize this variable. A dichotomous variable was employed indicating that there was either an intact family structure (parents living together), or parents were divorced, separated, or deceased, or otherwise not living together.

Table 5. Intactness of Family

	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
Not Intact	108	12.4	121	14.5	94	33.1	72	40.2
Intact	763	87.6	715	85.5	190	66.9	107	59.8

The family structures of these four groups were all slightly different. White females most often came from intact families (87.6 per cent). White males indicated that their families were intact 85.5 per cent of the time. When we turn to blacks, there is a large decrease in the percentage coming from intact families. Black females were from intact families 66.9 per cent of the time while black males indicated they were from intact families only 59.8 per cent of the time.

The intervening or social-psychological variables were operationalized as follows:

Family Authority Structure: determined by respondent's report as to how decisions are made between them and their parents.

> In general, how are most decisions between you and your parents made? (Circle one number):
>
> 1. My parents usually don't care what I do.
> 2. I usually can do what I want regardless of what my parents think.

3. I usually can make my own decisions, but my parents would like for me to consider their own opinions.
4. My opinions are usually as important as my parents in deciding what I should do.
5. I have considerable opportunity to make my own decisions but my parents usually have the final word.
6. My parents listen to me, but usually they make the decisions.
7. My parents usually tell me what to do.

The classification of this variable involved collapsing these seven response options into three categories: levels 1 and 2 into "laissez-faire," 3 and 4 into "democratic," and 5, 6, 7 into "autocratic" (Elder, 1962; Rehberg et al., 1970; Picou, 1971). The "laissez-faire" category was eliminated from the analysis because it contained only about four per cent of the sample (n=87), which would not have reliably supported the multivariate procedure utilized.

Table 6. Family Authority Structure

	White Female N	White Female %	White Male N	White Male %	Black Female N	Black Female %	Black Male N	Black Male %
Laissez-faire	29	3.3	42	5.0	5	1.8	11	6.2
Democratic	366	42.1	428	51.2	95	33.4	96	53.6
Autocratic	476	54.6	366	43.8	184	64.8	72	40.2

Males are much more highly represented in the "laissez-faire" and "democratic" categories. Over 55 per cent of both the white and black males but only 45 per cent of the white females, and 35 per cent of the black females are found in these two categories. The majority of females appear to have considered that their parents treated them in an autocratic manner while the males characterized their relationship with their parents to be more permissive or at least democratic.

Parents' Achievement Training: This concept was operationalized in terms of the following three questionnaire items and their response alternatives. Each item was dichotomized, so that the maximum variation was achieved while maintaining substantive meaning, by collapsing levels 1, 2, and 3 into 'low," and 4 and 5 into "high." The first parental achievement training variable read:

> "Generally over the past 5-8 years, how often have your parents praised or rewarded you when you did something well?
>
> 1 = hardly at all
> 2 = sometimes
> 3 = fairly often
> 4 = very often
> 5 = almost every time"

Table 7. Parental Achievement Training #1

Level	White Female N	 %	White Male N	 %	Black Female N	 %	Black Male N	 %
Low	477	54.8	551	65.9	140	49.3	102	57.0
High	394	45.2	285	34.1	144	50.7	77	43.0

Females are more likely than males to have perceived that their parents gave them positive reinforcement for being successful in an activity. Black females were most likely to be found in this category, then white females, followed by black males, and lastly white males.

The question and response categories for the second parental achievement training variable were as follows:

> "Generally over the past 5-8 years, have your parents stressed that you take pride in the things you have done well?

1 = almost never
2 = very seldom
3 = once in a while
4 = frequently
5 = very often"

Table 8. Parental Achievement Training #2

Level	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
Low	307	35.2	313	37.4	102	35.9	55	30.7
High	564	64.8	523	62.6	182	64.1	124	69.3

All four subgroups were very similarly divided on this question with less than 7 per cent difference between all four. The black males were most likely to have fallen into the high category, then the white females, closely followed by the black females, and finally the white males.

For the third parental achievement training variable, the question and response categories were:

"Generally over the past 5-8 years or so, have your parents stressed or emphasized that you should try to do things better than other students?

1 = yes, they have stressed it a lot
2 = yes, they have stressed it somewhat
3 = no, they seldom mention this
4 = they haven't said one way or the other
5 = no, they would rather I try not to do things better than other people."

Table 9. Parental Achievement Training #3

Level	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
Low	508	58.3	378	45.2	111	39.1	50	27.9
High	363	41.7	458	54.8	173	60.9	129	72.1

There were substantial differences between the blacks and whites on the distribution of responses for this question (over 30 per cent between highest and lowest). For the high level of this variable, black males were considerably more likely to be found, followed by black females, then by white males, and finally by white females.

Independence: determined by respondent's choice of response alternatives to the following questionnaire item. The dichotomization followed the same procedures as for the "Parents' Achievement Training" variables.

> "Generally over the past 5-8 years, have your parents stressed or emphasized your being able to do things by yourself, like buying your own clothes, going places by yourself, etc.?
>
> 1 = almost never
> 2 = very seldom
> 3 = once in a while
> 4 = frequently
> 5 = very often."

Table 10. Independence

Level	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
Low	317	36.4	322	38.5	97	34.2	49	27.4
High	554	63.6	514	61.5	187	65.8	130	72.6

Blacks, more than the whites, appeared to believe that their parents stressed independence; but only by a few percentage points. Black males were most likely to be in the high category, followed by the black females, white females, and white males.

Sex-Role Stereotypes: This concept was operationalized in terms of nine attitude statements. These nine items were divided into three groups (social, challenging and competitive statements) on the basis of zero-order correlations between items and on the basis of substantive interpretation. Tables which list the race and sex breakdown on these items are not included at this point since the analysis will use them in exactly the format described here. The tables in the analysis chapter will include first-order odds ratios which will describe the proportions of each of the four subgroups present in each category of these variables.

The items used for the social dimension of the concept are:

"I prefer

a. working with others
b. working by myself."

"I would rather

a. play a team game
b. play against just one other person."

"I enjoy sports more when I play against
a. one other player
b. several other players."

The items used for the challenging dimension of the concept are:

"I prefer jobs

a. that I might not be able to do
b. which I'm sure I can do."

"When I am sure I can do a job

a. I enjoy doing it more.
b. I become bored."

"When I do things to help at home, I prefer to

a. do usual things I know I can do.
b. do things that are hard and I'm not sure I can do."

Finally, the competitive dimension of the concept was based on the following items:

"I prefer a game

a. where I'm better than anyone else.
b. where everyone is about the same."

"I like playing a game when I am

a. as good as my playmate.
b. much better than my playmate."

"I would prefer classes in which
a. the students were all good as one another at the work.
b. I was better than almost all the others."

Marital Plans: This concept was operationalized through the use of two questions concerning behavioral expectations; one on whether or not they planned to marry (Table 11) and the other specifying the age at which they planned to marry (Table 12). Since both are to be used in the correlational analysis, no attempt was made to dichotomize.

Table 11. Plan to Marry?

	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
No	20	2.3	70	8.4	10	3.5	28	15.6
Yes	851	97.7	766	91.6	274	96.5	151	84.4

The females are the most likely to plan to marry with less than 5 per cent of either the white or black females not planning to marry. The white females are most likely to plan to marry, followed by the black females, white males, and black males.

Table 12. Age at which Respondent Plans to Marry or did Marry

Age	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
15	1	0.1	0	.0	0	.0	0	.0
16	4	0.5	1	0.1	2	0.7	0	.0
17	26	3.0	3	0.4	2	0.7	1	0.6
18	72	8.3	18	2.2	16	5.6	1	0.6
19	136	15.6	48	5.7	20	7.0	3	1.7
20	192	22.0	119	14.2	45	15.8	8	4.5
21	155	17.8	107	12.8	32	11.3	11	6.1
22	101	11.6	90	10.8	31	10.9	13	7.3
23	64	7.3	86	10.3	43	15.1	12	6.7
24	31	3.6	71	8.5	21	7.4	23	12.8
25	39	4.5	123	14.7	34	12.0	29	16.2
26	15	1.7	21	2.5	12	4.2	11	6.1
27	4	0.5	21	2.5	4	1.4	9	5.0
28	7	0.9	12	1.4	7	2.5	9	5.0
29	2	0.2	5	0.6	2	0.7	4	2.2
30	2	0.2	26	3.1	3	1.1	10	5.6
31-35	0	.0	10	1.2	0	.0	4	2.3
36-40	0	.0	3	0.3	0	.0	3	1.7
41-45	0	.0	0	.0	0	.0	0	.0
46-50	0	.0	2	0.2	0	.0	0	.0
No plans to marry	20	2.3	70	8.4	10	3.5	28	15.6
$\overline{X}$	20.8		22.9		22.2		25.0	
S.D.	2.3		3.3		2.7		3.9	
Mode	20.0		25.0		20.0		25.0	

Females appear to have planned to marry several years younger than the males. Looking at the means, white females planned to marry the earliest, with white males following along two years later, black females planned to marry second earliest, followed by black males almost three years later. The males were more widely dispersed, as the standard deviation shows. For the females, the most frequent response was twenty years old. Twenty-five was the modal response for the males.

Fertility Expectations: This variable was determined by respondents' reports of the number of children they expected to have. Actual number stated was the only operationalization used since analysis involved only the use of correlations.

Table 13. Number of Children Expected

Number	White Female N	White Female %	White Male N	White Male %	Black Female N	Black Female %	Black Male N	Black Male %
0	21	2.4	22	2.6	8	2.8	2	1.1
1	19	2.2	19	2.3	18	6.3	3	1.7
2	323	37.1	330	39.5	109	38.4	40	22.3
3	193	22.2	200	23.9	43	15.1	38	21.2
4	191	21.9	124	14.8	57	20.1	33	18.4
5	49	5.6	33	3.9	19	6.7	10	5.6
6	33	3.8	16	1.9	8	2.8	12	6.7
7	4	0.5	4	0.5	5	1.8	4	2.2
8	9	1.0	3	0.4	2	0.7	3	1.7
9	0	.0	0	.0	0	.0	0	.0
10	2	0.2	5	0.6	3	1.1	3	1.7
More than 10	7	0.7	10	1.1	2	0.8	3	1.7
No plans to marry	20	2.3	70	8.4	10	3.5	28	15.6
$\overline{X}$	3.2		3.0		3.1		4.2	
S.D.	2.7		2.6		2.0		4.8	
Mode	2.0		2.0		2.0		2.0	

Mean fertility expectations were very close for all groups except the black males. The white females, white males, and black females all had mean expectations of about three children. But the black males' mean expectations were much higher, 4.2 children. The dispersion also had a similar distribution. The black females showed little dispersion, the white males and females slightly more, and the black male a fairly large dispersion. But the modal response for all four groups was two children.

The two ultimate dependent variables were educational and occupational expectations. They were operationalized as follows:

Educational Expectations: determined by a question asking "How much education do you really expect to get?" Response options and number in each category were as follows:

Table 14. Educational Expectations

Coded Responses	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
0=none after high school	170	19.5	145	17.3	38	13.5	47	26.3
1=vocational-technical	159	18.2	98	11.7	56	19.7	28	15.6
2=some college	142	16.3	67	8.0	19	6.7	12	6.7
4=bachelors degree	302	34.7	326	39.0	108	38.0	63	35.2
6=masters degree	65	7.5	115	13.8	43	15.1	12	6.7
8=doctors degree	33	3.8	85	10.2	20	7.1	17	9.5
$\overline{X}$	2.6		3.5		3.3		2.9	
S.D.	2.1		2.5		2.3		2.5	
Mode	4.0		4.0		4.0		4.0	

The mean educational expectation level for all four groups was less than a bachelors degree. White females had the lowest level of educational expectations, followed by black males, black females, and white males. The dispersion for all four groups was about the same. Interestingly, the modal educational expectation level was a bachelors degree for all four groups.

The above breakdown will be used in the correlational analysis. For the contingency table analysis a dichotomy was formed such that low educational expectations were assigned to all those who expected to have less than a college degree. High educational expectations were associated with those respondents who planned to complete a college degree or more.

Table 15. Educational Expectations (dichotomized)

Level	White Female N	White Female %	White Male N	White Male %	Black Female N	Black Female %	Black Male N	Black Male %
Low	471	54.0	310	37.0	113	39.8	87	48.6
High	400	46.0	526	63.0	171	60.2	92	51.4

For the dichotomized educational expectations, there were large differences between the four groups. High educational expectations were most frequent among white males, then black females, followed by a large drop for the black males; and those least frequently found in this category are white females.

Occupational Expectations: determined by a question similar to that for educational expectations except referring to expected occupation. Responses were initially coded as were those for father's occupation. For the contingency table analysis, the dichotomy was formed by breaking the prestige score into low and high levels between the scores of

73 and 74 on the basis of Davis' rules (1971:25-32).

Table 16. Occupational Expectations

Level	White Female		White Male		Black Female		Black Male	
	N	%	N	%	N	%	N	%
Low	319	36.6	437	52.3	127	44.7	106	59.2
High	552	63.4	399	47.7	157	55.3	73	40.8

An indication of the sex-typing of occupations was pointed up by this distribution. Females, black and white, were more highly represented in the high level of occupational expectation than were the males. This difference of over 20 percentage points between white females and black males may be attributed to differences in the prestige scores of blue-collar male jobs and white-collar female jobs.

Statistical Analysis

Several statistical techniques were employed in this study. Each technique was used for different objectives of the analysis in terms of the level of measurement of the variables and the hypothesis tested.

For the purpose of testing to see if the analysis subsample was biased with regard to background variables, three techniques were used depending upon assumptions regarding level of measurement. For variables assumed to be nominal or ordinal, Kolmogorov-Smirnov Two-Sample test was used in order to measure the degree of agreement between two cumulative distributions. This test statistic determines whether two samples have been drawn from populations with the same distribution.[4] For the background variables which were dichotomous, the Z-test of differences between percentages was used to measure similarity of the two samples (Blalock, 1972:228-230). The T-test was used for interval or ratio level variables in order to compare the means of the two samples (Steel and Torrie, 1960:78-81; Clarke et al., 1965:227-230). (See Appendix B for more precise definitions of formulas used and explanations of actual test meanings.)

The hypotheses can be divided into those concerned with bivariate relationships and those involving multivariate relationships. For the bivariate hypotheses, the variables can be classified as quasi-interval, interval or ratio level. Pearson correlation techniques will be used to obtain coefficients which indicate the degree to which variation in one variable is related to variation in another, or a measure of the intensity of association (Steel and Torrie, 1960:183). Tests for statistically significant differences between coefficients will be computed using a formula to convert r's to z's (Blalock, 1960:310; Steel and Torrie, 1960:190). To further specify the relationships, social origin variables will be introduced as controls resulting in partial correlations. The partial coefficient is compared with the original (zero-order) coefficient. It may be higher, lower, or just the same. The simplest case is a relationship between two variables, X and Y, controlling for a third, T. When there is a non-zero original coefficient and the partial is close to zero, we can say that "T explains Y." Other times, T does not affect the X Y relationship, i.e., the partial correlation is the same as the zero order, and we can say that X and Y are "really correlated." T is called a "suppressor variable" when the partial correlation is stronger than the zero order. A fourth outcome, "specification," occurs when the category of T must be specified before the strength or weakness of the X Y correlation can be discussed (Davis, 1971; Blalock, 1960; Namboodiri, 1975; Nie et al., 1975).

To this point, only those hypotheses concerned with bivariate relationships have been discussed. Since numerous variables essential to this analysis were measured on either the nominal or ordinal level, a nonparametric technique for analyzing the interrelationships and individual "effects" of several variables at one time was chosen. Goodman's (1969, 1972) framework for log-linear analysis was chosen as the most appropriate technique for this objective. This method operates on the cell frequencies in multi-way contingency tables testing the fit of hierarchical models with the aim of finding a model which most parsimoniously accounts for the association among a set of variables. The models and the techniques are particularly suited for the analysis of dichotomized and polytimized variables considered to be qualitative or categorical (Goodman, 1969; 1972; Fienberg, 1970; Bishop et al., 1975). A "saturated" model, which contains all the main and interaction effects of every variable in the model, exactly reproduces the observed cell frequencies. Each model can be expressed in terms of both multiplicative or additive effects (Goodman, 1972).

Our primary interest is the deletion of some of the terms from the saturated model. When terms are deleted, we assert that they are not present in the data and that only the marginal tables representing the terms left in the model are necessary to adequately represent the relationship among the variables. To test the adequacy of the fit of an "unsaturated" model to the data of the full contingency table, the expected and observed cell frequencies are compared using the likelihood-ratio chi-square. This procedure is the reverse of the usual chi-square situation in that the attempt is to find a low value of chi-square which would normally be considered nonsignificant. Models are tested until a "best-fit" model is found which has a sufficiently low chi-square value and involves the fewest parameters so as to sufficiently reproduce the data. This model is assumed to be the most parsimonious representation of the relationships among the variables in the full table. While many authors (Kasarda and Janowitz, 1974; Cohen and Kluegel, 1978; Knoke, 1974; Rosenfeld, 1978) have used the Goodman system, they rely on the use of lambda and tau effects. These effects indicate whether a coefficient is statistically different from zero and the direction of the association's effects, but they fail to allow easy interpretation of the magnitude of the effects (Page, 1977). Following the suggestion of Page, this analysis will examine odds ratios within the best fit tables.

An odds ratio, also referred to as a risk ratio or a cross-product ratio, "is the ratio of frequencies for two categories of some variable" (Davis, 1974:190) in its simplest form. Odds ratios are extremely useful due to their simple substantive interpretation.

> For example, in the simple case of two dichotomous variables, the odds ratio measures the increase (or decrease) in the likelihood of a given value occurring, given the level of the other variable (e.g. 'males are twice as likely as females, i.e. have double the odds, to respond positively/negatively to question X') (Page, 1977:421).

An odds ratio of 1.00 indicates statistical independence, while values between 0 and .99 indicates a negative relationship and anything greater than 1.00 indicates a positive relationship. The meanings of the odds ratios vary depending on the number of variables involved and these will be discussed in the following chapter as they were used.[5]

Goodman's system allows for two different approaches to the analysis of associations among a number of variables (Goodman, 1969; Cohen and Kluegel, 1978). The two approaches are confirmatory, i.e., a set of a priori models are hypothesized to account for the relationships among a set of variables, and exploratory, i.e., different models are examined with the intention of finding the best fitting one. The second approach is the one to be used in this analysis. It allows us to test our explicit hypotheses while allowing for the possibility of serendipitious findings with regard to other relationships which have not been hypothesized. It must be remembered that this does not mean that the analysis is not grounded in theory but only that logical deduction only conceives of a limited number of hypotheses prior to the initiation of the analysis. In fact it must be pointed out that the log-linear method makes no assumptions about the causal ordering of a set of variables, so that a researcher must bring theoretical assumptions about the causal or at least temporal sequences into the analysis to make sense of the massive accumulation of numbers possible with this method. (For example, a 5 variable model has 1 five-variable effect, 31 possible four-variable effects, 1023 possible three-variable effects, 1023 possible two-variable effects, and 31 possible one-variable effects. Each of these effects has a different interpretation from each other effect, as well as numerous possible interpretations for each effect depending on the temporal ordering.)

Notes

1. The questionnaire items utilized in this thesis are reproduced in Appendix A.

2. Davis suggests a 50:50 split and when the variable is nominal the 50:50 split should have substantive compatibility (1971:25). For example, on the parental achievement training variables, the dichotomies were formed by classifying categories 1, 2, and 3 into the low level and 4 and 5 into the high level. This resulted in the two levels having no greater than a 30:70 split which Davis suggests as the extreme for dichotomization. This split took on substantive meaning since using only category 5 for the high level would have resulted in numerous extreme categories and using 3, 4, and 5 as the high level would have combined categories which appear to differ considerably in terms of their commonsense meaning.

3. While it has been shown that mothers' working outside of the home influences young girls' future plans, this relationship has been shown to be largely a result of whether a mother works out of economic necessity, to supplement her spending money, or to have a career of her own (Almquist and Angrist, 1970; Hoffman, 1974; Stoll, 1974). For dichotomization, maternal employment was divided between those who were employed and those who were not employed since there was no information on why mothers were working.

4. For a more extensive treatment than given here, see Seigel, 1956:127-136.

5. For a more extensive treatment of odds ratios than is given here, see Davis, 1974:190-197; Page, 1977.

CHAPTER IV

ANALYSIS[1]

This chapter presents the findings applicable to each hypothesis. For those hypotheses using the Goodman log-linear procedure, the tables of observed and expected cell values and the tables of selected marginals fitted are on file in the Department of Sociology.

Because most of the statistical analysis involves a multi-level factorial design containing four or more levels of cross-classification, all variables used in contingency tables were dichotomized in order to clarify interpretations of the odds ratios.[2]

The first proposition tested dealt with the differences in sex-appropriate situations. Specifically, this proposition and its derived hypotheses were:

PROPOSITION I: One's sex will influence the stereotypical sex-appropriate behaviors chosen.

Hypothesis 1: Females will express more interest in social activities than males.

Hypothesis 2: Males will express more interest in competitive activities than females.

Hypothesis 3: Males will be more likely to be interested in challenging situations while females will prefer to complete tasks they have been successful at before.

Table 17 indicates that hypothesis 1 received partial support. Only the first variable supported the hypothesis. The second order odds ratios for the likelihood of being social when compared with sex of respondent indicated that for the item AA01, females were 1.61 times as likely as males to have chosen the social category whether they were

Table 17. Odds Ratios for Three Social Variables

VARIABLE	First Order: Odds Ratio	Social A Nonsocial	Second Order: Odds Ratio	Social A Nonsocial	Female SEX Male	Social A Nonsocial	Black RACE White	Overall (3 variable Odds Ratio
A=AA01	10.62	(BF)		1.61	(B)	2.03	(F)	1.00
	6.60	(BM)						
	5.24	(WF)						
	3.26	(WM)		1.61	(W)	2.03	(M)	
A=AA06	10.02	(BF)		1.00	(B)	1.92	(F)	1.00
	10.02	(BM)						
	5.23	(WF)						
	5.23	(WM)		1.00	(W)	1.92	(M)	
A=AA015	7.74	(BF)		1.00	(B)	1.38	(F)	1.00
	7.74	(BM)						
	5.59	(WF)						
	5.59	(WM)		1.00	(W)	1.38	(M)	

(B) = Black
(W) = White
(F) = Female
(M) = Male

AA01: Social = I prefer working with others; Nonsocial = I prefer working by myself.
AA06: Social = I would rather play a team game; Nonsocial = I would rather play against just one other person.
AA015: Social = I enjoy sports more when I play against several other players; Nonsocial = I enjoy sports more when I play against one other player.

black or white. But for the items AA06 and AA015, females were no more likely than males to have chosen the social category when sports were the center of concern. Of interest, for the specification of this relationship by race, is the fact that the second order odds ratios comparing social responses to the race of the respondent showed that for all three variables blacks were more likely than whites to have chosen the social category (ranging from 1.38 times to 2.03 times). The overall odds ratios of 1.00 for all three variables indicated that there was no three-way interaction in the data.

First order odds ratios for the AA01 variable indicated that black females were over 10 times as likely to have chosen the social category as the non-social category; while white males were only 3 times as likely to have chosen the social category over the non-social category. For all three social variables an interesting observation was that all the odds ratios in each table were equal to or greater than 1 which indicated a positive relationship between each social variable and race and sex of respondent. For the first order odds ratios, the results suggest that all four groups were more likely to choose the social category; the differences appeared in the degree to which they chose the social category.

Table 18 did not support hypothesis 2. For second order odds ratios comparing competitive responses and sex, all three variables had ratios of over 1.00 which indicated that females were more likely to have chosen the competitive situation whether it was in a game or in the classroom. For the second order odds ratios comparing competitive responses to race, variables AA04 and AA07 indicated that blacks were

Table 18. Odds Ratios for Three Competitive Variables

VARIABLE	First Order: Odds Ratio	Competitive A Non-Competitive	Second Order: Odds Ratio	Competitive A Non-Competitive	Female SEX Male	Competitive A Non-Competitive	Black RACE White	Overall (3 variable) Odds Ratio
A= AA04	6.59	(BF)		1.93	(B)			
	3.41	(BM)				0.49	(F)	1.00
	13.38	(WF)		1.93	(W)			
	6.93	(WM)				0.49	(M)	
A= AA017	8.47	(BF)		1.92	(B)			
	4.42	(BM)				0.46	(F)	1.00
	18.35	(WF)		1.92	(W)			
	9.58	(WM)				0.46	(M)	
A= AA018	9.90	(BF)		1.58	(B)			
	6.25	(BM)				1.00	(F)	1.00
	9.90	(WF)		1.58	(W)			
	6.25	(WM)				1.00	(M)	

(B) = Black (F) = Female
(W) = White (M) = Male

AA04: Competitive = I prefer a game where everyone is about the same; Non-competitive = I prefer a game where I'm better than anyone else.
AA017: Competitive = I like a game when I'm as good as my playmates; Non-competitive = I like a game when I'm better than my playmates.
AA018: Competitive = I prefer classes where students are as good as one another; Non-competitive = I prefer classes where I'm better than almost all the others.

less than .5 times as likely to choose the competitive situation. For variable AA018 there were no differences by race. As with the first table, the overall odds ratio showed that there was no three-way interaction in the data.

Turning our attention to the first order odds ratios, we again see that all the ratios were well over one indicating that all groups chose the competitive situation far more frequently than the non-competitive one. Again, the differences were in the degree to which they chose the former over the latter.

Hypothesis 3, which stated that males were more interested in challenging situations than females, was supported by Table 19. The second order odds ratios, for the relationship between sex and selection of a challenging situation, were about .50 for all three variables. This can be interpreted to mean that females, regardless of race, were half as likely to have chosen challenging situations or males were twice as likely to have chosen challenging situations. Turning to race and its relationship with choice of a challenging situation, we see that with regard to jobs, blacks were half as likely to choose the challenging situation. But on the question asked with regard to home activities, there was no difference by race (odds ratio = 1.00). As with the other sex-appropriate behavior variables, the overall odds ratio is 1.00 indicating that there was no interaction for these variables with both race and sex.

The first order odds ratios, once again, present us with several interesting points. All these odds were less than one indicating that all the respondents would rather have chosen the non-challenging situa-

Table 19. Odds Ratios for Three Challenging Variables

VARIABLE	First Order: Odds Ratio	Challenging A Non-Challenging	Second Order: Odds Ratio	Challenging A Non-Challenging	Female SEX Male	Challenging A Non-Challenging	Black RACE White	Overall (3 variable) Odds Ratio
A=AA02	0.08	(BF)		0.55	(B)			1.00
	0.15	(BM)				0.46	(F)	
	0.18	(WF)		0.55	(W)			
	0.33	(WM)				0.46	(M)	
A=AA011	0.06	(BF)		0.47	(B)			1.00
	0.14	(BM)				0.50	(F)	
	0.13	(WF)		0.47	(W)			
	0.27	(WM)				0.50	(M)	
A=AA019	0.37	(BF)		0.59	(B)			1.00
	0.63	(BM)				1.00	(F)	
	0.37	(WF)		0.59	(W)			
	0.63	(WM)				1.00	(M)	

(B) = Black
(W) = White

(F) = Female
(M) = Male

AA02: Challenging = I prefer jobs that I might not be able to do; Non-challenging = I prefer jobs I'm sure I can do.

AA011: Challenging = When I'm sure I can do a job I become bored; Non-challenging = When I am sure I can do a job I enjoy doing it more.

AA019: Challenging = At home, I prefer things that are hard and I'm not sure I can do; Nonchallenging = At home, I prefer things to do I know I can do.

tions. For the two variables dealing with jobs in general (AA02 and AA011), these first order odds were all extremely small (range of 0.06 to 0.33). But in the home situation, the odds ratios jumped such that the range was from 0.37 to 0.63. It appears that, in general, challenging activities were entered into more often in the home setting than in job settings.

The second proposition tested concerned the strength of the relationship between educational and occupational expectations. The proposition and its derived hypotheses were:

PROPOSITION II: Educational expectations will be related to occupational expectations.

Hypothesis 4: The higher the educational expectations, the higher the occupational expectations.

Hypothesis 5: The relationship between educational expectations and occupational expectations will be stronger for males than females.

Hypothesis 6: The relationship between educational expectations and occupational expectations will be stronger for black females than white females.

For all four groups, there is a significant zero-order correlation between educational and occupational expectations (Table 20). These results supported hypothesis 4. Hypothesis 5 only received partial support from the test of differences between correlation coefficients presented in Table 21. The relationship between educational and occupational expectations was significantly greater for white males when compared to both black and white females. The difference in correlation between black males and females was statistically significant. However, hypothesis 5 was not supported in the test between black males and white females since this difference was not close to statistical

Table 20. Partial Correlation Analysis of Educational Expectation-Occupational Expectation Relationship*

	Black Female	Black Male	White Female	White Male
Zero-Order relationship	.32	.47	.43	.61
First-Order Partials, controlling for:				
Father's Education	.31	.43	.39	.54
Mother's Education	.29	.42	.39	.57
Mother's Occupation	.30	.45	.43	.61
Father's Occupation	.30	.44	.40	.55
Second-Order Partials, controlling for:				
Father's and Mother's Education	.29	.41	.38	.54
Father's Education and Mother's Occupation	.29	.42	.38	.54
Father's Education and Occupation	.29	.42	.38	.53
Mother's Education and Occupation	.28	.41	.39	.57
Mother's Education and Father's Occupation	.28	.42	.38	.53
Father's and Mother's Occupation	.29	.43	.40	.54
Third-Order Partials, controlling for:				
Father's and Mother's Education, and Mother's Occupation	.28	.40	.38	.54
Father's and Mother's Education, and Father's Occupation	.28	.41	.37	.52
Father's Education, and Mother's and Father's Occupation	.28	.41	.38	.52
Mother's Education, and Mother's and Father's Occupation	.28	.41	.38	.53
Fourth-Order Partials, controlling for:				
Father's and Mother's Education, and Father's and Mother's Occupation	.28	.40	.37	.52

*All significant at .001 level.

Table 21. Tests of Differences between Zero-Order Correlations for Occupational and Educational Expectations[3]

Black Males vs. Black Females Z = 1.89*
White Males vs. White Females Z = 5.24**
White Females vs. Black Females Z = 1.85*
White Males vs. Black Males Z = 2.41**
Black Males vs. White Females Z = 0.65
White Males vs. Black Females Z = 5.53**

* = significant at .05 level.
** = significant at .01 level.

significance. But the relationship was in the hypothesized direction since the correlation for black males (r = .474) was greater than that for white females (r = .431).

While it was hypothesized (Hypothesis 6) that the correlation between educational and occupational expectations would be greater for black females than white females, the reverse was actually found. In fact, the difference between the correlation for white females (r = .431) and black females (r = .322) was found to be statistically significant.

To be sure these correlations were not the artifact of differences in social origins, partial correlations controlling for social origins were presented in Table 20. None of these partial correlation coefficients was as much as .10 different from the original zero-order correlation. This suggests that the relationships between any of the social origin variables and either educational or occupational expectations did not significantly contribute to the original correlations between educational and occupational expectations for any of the four groups.

The third proposition was concerned with the impact of social origins on both educational and occupational expectations. It and the derived hypotheses were stated as follows:

PROPOSITION III: Social origins influence educational and occupational expectations differently by race and sex group.

Hypothesis 7: Social origins (father's and mother's educational and occupational achievements) will more strongly affect the educational and occupational expectations of white females than white males.

Hypothesis 8: Social origins will have no different affect on the educational and occupational expectations of black males and black females.

Hypothesis 9: Social origins will more strongly affect the educational and occupational expectations of whites than blacks (whether male or female).

Looking at educational expectations, hypothesis 7 received no support from the data presented in Table 22. Looking at the second order odds ratios, which describe the relationship between sex and educational expectations, white females with low levels of father's education were about 0.8 times as likely to have high educational expectations as white males. This relationship was only 0.35 times as likely for white females with a high level of father's education. A very similar relationship was found when looking at the influence of father's occupation. High educational expectations were 0.68 times as likely for white females as males for low father's occupation, and 0.38

Table 22. Odds Ratios for Social Origins with Educational Expectations

VARIABLE	First Order: Odds Ratio	High EDEXP Low	Second Order: Odds Ratio	High A Low	High EDEXP Low	Female SEX Male	High EDEXP Low	Black RACE White	High EDEXP Low	Overall (4 variable) Odds Ratio
A=FED	1.31	(BF) (LFA)		2.38	(BF)	1.62	(B) (LFA)	2.74	(F) (LFA)	1.00
	3.12	(BF) (HFA)					2.27		1.00	
	0.81	(BM) (LFA)		5.43	(BM)	0.71	(B) (HFA)	2.74	(F) (HFA)	
	4.41	(BM) (HFA)								
	0.48	(WF) (LFA)		2.38	(WF)	0.80	(W) (LFA)	1.35	(M) (LFA)	
	1.15	(WF) (HFA)					2.27		1.00	
	0.60	(WM) (LFA)		5.43	(WM)	0.35	(W) (HFA)	1.35	(M) (HFA)	
	3.27	(WM) (HFA)								
A=MED	1.24	(BF) (LMA)		3.05	(BF)	1.43	(B) (LMA)	2.83	(F) (LMA)	1.00
	3.80	(BF) (HMA)					1.00		1.00	
	0.87	(BM) (LMA)		3.05	(BM)	1.43	(B) (HMA)	2.83	(F) (HMA)	
	2.66	(BM) (HMA)								
	0.44	(WF) (LMA)		3.05	(WF)	0.50	(W) (LMA)	0.99	(M) (LMA)	
	1.34	(WF) (HMA)					1.00		1.00	
	0.88	(WM) (LMA)		3.05	(WM)	0.50	(W) (HMA)	0.99	(M) (HMA)	
	2.69	(WM) (HMA)								
A=FOCC	1.40	(BF) (LFO)		2.40	(BF)	1.49	(B) (LFO)	2.81	(F) (LFO)	1.00
	3.37	(BF) (HFO)					1.79		1.00	
	0.94	(BM) (LFO)		4.30	(BM)	0.83	(B) (HFO)	2.81	(F) (HFO)	
	4.05	(BM) (HFO)								
	0.50	(WF) (LFO)		2.40	(WF)	0.68	(W) (LFO)	1.28	(M) (LFO)	
	1.20	(WF) (HFO)					1.79		1.00	
	0.74	(WM) (LFO)		4.30	(WM)	0.38	(W) (HFO)	1.28	(M) (HFO)	
	3.18	(WM) (HFO)								
A=MAOCC	1.25	(BF) (LMO)		1.62	(BF)	1.43	(B) (LMO)	1.78	(F) (LMO)	1.00
	2.02	(FF) (HMO)					1.00		1.00	
	0.87	(BM) (LMO)		1.62	(BM)	1.43	(B) (HMO)	1.78	(F) (HMO)	
	1.42	(BM) (HMO)								
	0.70	(WF) (LMO)		1.62	(WF)	0.50	(W) (LMO)	0.62	(M) (LMO)	
	1.14	(WF) (HMO)					1.00		1.00	
	1.40	(WM) (LMO)		1.62	(WM)	0.50	(W) (HMO)	0.62	(M) (HMO)	
	2.27	(WM) (HMO)								

(B) = Black (F) = Female
(W) = White (M) = Male
EDEXP=Educational Expectation
FED = Father's Education
MED = Mother's Education

FOCC = Father's Occupation
MAOCC=Mother's Occupation
LFA = Low FED
HFA = High FED
LFO = Low FOCC

HFO = High FOCC
LMA = Low MED
HMA = High MED
LMO = Low MAOCC
HMO = High MAOCC

times as likely for high father's occupation. Comparing these sets of odds to arrive at the effect of father's background, social origins had twice the effect for white males that they had for females (2.27 for father's education and 1.79 for father's occupation). All levels of mother's occupation and education when compared with low and high educational expectations had odds ratios of 0.5. This means that at any level of these variables white males were twice as likely to have high educational expectations as white females. In other words, mother's background had no influence on educational expectations.

Still looking at educational expectations, hypothesis 8 received partial support (Table 22). For low social origins, the odds of having high educational expectations were all close to 1.5 for black females compared to black males. But for high social origins, the odds for each measure of social origin differed. For father's education, black females were 0.7 times as likely to have high educational expectations when compared to black males. Black females with a high level of father's education were 0.8 times as likely to have high educational expectations as black males. As with the whites, each level of mother's background had the same odds of affecting educational expectation (odds = 1.43). Also, as with the whites, a comparison of the odds for the effects of sex and educational expectations, provided results which indicated that father's social origins had twice the effect for black males that they had for black females. Support was provided for hypothesis 8 by the comparison of the effect of mother's education and occupation on educational expectation. Since when these odds were compared they were equal to 1.0, it was concluded that there was no difference between their effects on black males and females.

Hypothesis 9 was not supported by the analysis (Table 22). For all four social origin variables the third order effects of social origins on the relationship between race and educational expectations were all 1.00. This means that level of social origins was not influencing educational expectations when race groups were compared. The sex differences remain, but there were no race differences in the influence of social origins.

The presentation of the first order odds ratios provides us with an interesting observation regarding the relationship of social origins to educational expectations. It is normally assumed that a low level of parental background will result in a lower probability of having high educational expectations, and the reverse for a high level of parental background. In other words, the odds of being high on educational expectations should be less than 1 for a low level of parental background and greater than 1 for a high level of parental background. This held true on all four social origin variables for black males and white females. For white males, this relationship held true for all the social origins variables but mother's occupation where high educational expectations were more likely whether the mother worked in the home or out of the home. The more interesting deviation from this relationship was found when looking at the odds for black females. For all four social origin variables, black females were more likely to have high educational expectations than low educational expectations regardless of the level of social origins.

Turning to occupational expectations, (Table 23) the relationships

Table 23. Odds Ratios for Social Origins with Occupational Expectations

VARIABLE	First Order: Odds Ratios	High OCCEXP Low	Second Order: Odds Ratios	High A Low	High OCCEXP Low	Female SEX Male	High OCCEXP Low	Black RACE White	High OCCEXP Low	Overall (4 variable) Odds Ratio
	1.22	(BF) (LFA)		1.68	(BF)	2.66	(B) (LFA)	1.00	(F) (LFA)	
	2.04	(BF) (HFA)					1.81			
	0.46	(BM) (LFA)		3.03	(BM)	1.47	(B) (HFA)	1.00	(F) (HFA)	
A=FED	1.39	(BM) (HFA)								1.00
	1.22	(WF) (LFA)		1.68	(WF)	2.66	(W) (LFA)	1.00	(M) (LFA)	
	2.04	(WF) (HFA)					1.81			
	0.46	(WM) (LFA)		3.03	(WM)	1.47	(W) (HFA)	1.00	(M) (HFA)	
	1.39	(WM) (HFA)								
	1.15	(BF) (LMA)		1.94	(BF)	1.87	(B) (LMA)	1.00	(F) (LMA)	
	2.23	(BF) (HMA)					1.00			
	0.62	(BM) (LMA)		1.94	(BM)	1.87	(B) (HMA)	1.00	(F) (HMA)	
	1.20	(BM) (HMA)								1.00
A=MED	1.15	(WF) (LMA)		1.94	(WF)	1.87	(W) (LMA)	1.00	(M) (LMA)	
	2.23	(WF) (HMA)					1.00			
	0.62	(WM) (LMA)		1.94	(WM)	1.87	(W) (HMA)	1.00	(M) (HMA)	
	1.20	(WM) (HMA)								
	1.21	(BF) (LFO)		1.81	(BF)	2.46	(B) (LFO)	1.00	(F) (LFO)	
	2.19	(BF) (HFO)					1.62			
	0.49	(BM) (LFO)		2.92	(BM)	1.52	(E) (HFO)	1.00	(F) (LFO)	
A=FOCC	1.44	(BM) (HFO)								1.00
	1.21	(WF) (LFO)		1.81	(WF)	2.46	(W) (LFO)	1.00	(M) (LFO)	
	2.19	(WF) (HFO)					1.62			
	0.49	(WM) (LFO)		2.92	(WM)	1.52	(W) (HFO)	1.00	(M) (HFO)	
	1.44	(WM) (HFO)								
	1.15	(BF) (LMO)		1.25	(BF)	1.87	(B) (LMO)	0.73	(F) (LMO)	
	1.43	(BF) (HMO)					1.00		1.00	
	0.61	(BM) (LMO)		1.25	(BM)	1.87	(B) (HMO)	0.73	(F) (HMO)	
A=MAOCC	0.76	(BM) (HMO)								1.00
	1.57	(WF) (LMO)		1.25	(WF)	1.87	(W) (LMO)	0.73	(M) (LMO)	
	1.96	(WF) (HMO)					1.00		1.00	
	0.84	(WM) (LMO)		1.25	(WM)	1.87	(W) (LMO)	0.73	(M) (HMO)	
	1.05	(WM) (HMO)								

(B) = Black (F) = Female
(W) = White (M) = Male
OCCEXP=Occupational Expectations
FED=Father's Education
MED=Mother's Education

FOCC=Father's Occupation
MAOCC=Mother's Occupation
LFA=Low FED
HFA=High FED
LMA=Low MED

HMA=High MED
LFO=Low FOCC
HFO=High FOCC
LMO=Low MAOCC
HMO=High MAOCC

between sex and occupational expectations were the same regardless of race so they are discussed only with regard to sex. For low father's education, females were 2.66 times as likely as the males to have high occupational expectations, while for high father's education, the same relationship was only 1.47. This indicated that overall the movement from low to high father's education had almost twice (1.81) as much influence on the occupational expectations of females as it had on these expectations for males. For father's occupation a similar relationship was found between sex and occupational expectations. Over all the change from low to high father's occupation had 1.6 times as much influence on the occupational expectations of females as it had on males. This was the reverse of the relationship hypothesized (hypothesis 7). Hypothesis 8 was not supported since a difference in the influence of social origins on occupational expectations was found between black males and females.

For mother's education and occupation, used as measures of social origins, no difference was obtained among the four groups for either level of these variables. For both these social origin variables, females were almost twice (1.87) as likely to have high occupational expectations as were males regardless of level of mother's education or occupation. Overall, this means that when males and females were compared, low and high levels of maternal social origins had the same influence on occupational expectations. Since it was hypothesized (hypothesis 7) that the occupational expectations of white males and females would vary by level of social origins, this hypothesis was not supported. For hypothesis 8, it was hypothesized that different levels of social origins would have the same influence on the occupational expectations of black males and females. The above findings supported hypothesis 8.

It was hypothesized (hypothesis 9) that social origins would influence the occupational expectations of whites more than blacks. But it received no support from the data presented in Table 23. For all social origin variables except mother's occupation, there was no difference in occupational expectations by race. For mother's occupation, blacks, whether male or female, were 0.73 times as likely to have high occupational expectations as whites regardless of whether the mother was employed or not. So overall, in moving from the level of mother's working in the home to the level of mother's not working in the home, there was no change in the relationship between race and occupational expectations.

An interesting observation can be made for the first order odds ratios. As for educational expectations, we would expect low social origins to result in a lower probability of high occupational expectations. This was true for black and white males on father's and mother's education and father's occupation. But on these three variables, black and white females showed a higher likelihood of having high occupational expectations regardless of level of social origins. On mother's occupation, black and white females continued to have high occupational expectations regardless of level of social origins. The odds for white males, regardless of social origins, are both very close to 1, indicating that mother's occupation had no influence on occupational expectations. For black males, both levels of mother's occupation had greater probabilities of low than high occupational expectations associated with them.

The influence of parental achievement training patterns on educational expectations was the concern of the fourth proposition and its derived hypotheses. They were stated as follows:

PROPOSITION IV: Parental achievement training patterns will influence educational expectations.

Hypothesis 10: Parental achievement training practices will be greater for white males than white females.

Hypothesis 11: There will be no differences in achievement training practices for black males and black females.

Hypothesis 12: Parental achievement training will be positively associated with educational expectations.

Only the third parental achievement training variable supported hypothesis 10 (Table 24). In looking at the second order odds ratios for this variable, the ratio indicated that white females were 0.59 times as likely to have perceived high parental achievement training as white males. Lack of support for this hypothesis was found in the first two parental achievement training variables since the first of these indicated that white females were 1.54 times as likely to perceive high parental training as white males. The second achievement training variable indicated that there was no difference between males and females since the odds were 1.00.

Hypothesis 11 also received only partial support. Only the second parental achievement training variable showed no differences between black males and females (odds ratio = 1.00). For the other two variables, females were more likely to perceive high parental training on the first (odds ratio = 1.54) and males were more likely to perceive

Table 24. Odds Ratios for Parental Achievement Training Variables

VARIABLE	First Order: Odds Ratios	High A Low	Second Order: Odds Ratios	High A Low	Female SEX Male	High A Low	Black RACE White	Overall (3 variable) Odds Ratio
A=PAT 1	1.08	(BF)		1.54	(B)	1.33	(F)	1.00
	0.70	(BM)						
	0.81	(WF)		1.54	(W)	1.33	(M)	
	0.53	(WM)						
A=PAT 2	1.79	(BF)		1.00	(B)	1.00	(F)	1.00
	1.79	(BM)						
	1.79	(WF)		1.00	(W)	1.00	(M)	
	1.79	(WM)						
A=PAT 3	1.55	(BF)		0.59	(B)	2.16	(F)	1.00
	2.61	(BM)						
	0.72	(WF)		0.59	(W)	2.16	(M)	
	1.21	(WM)						

(B) = Black
(W) = White
(F) = Female
(M) = Male

PAT 1 = Parental Achievement Training 1
PAT 2 = Parental Achievement Training 2
PAT 3 = Parental Achievement Training 3

high parental training on the third (odds ratio = 0.59).

The positive association (hypothesis 12) between the parental achievement training variables and educational expectations was supported in Table 25. For all variables the odds ratios indicated that higher levels of perceived parental training were associated with higher levels of educational expectations. For all four subgroups, except for black males and females on the first parental achievement training variable, the odds of having high educational expectations were about 1.8

Table 25. Odds Ratios for Parental Achievement Training Variables with Educational Expectations

VARIABLE	First Order: Odds Ratios	High EDEXP Low	Second Order: Odds Ratios	High A Low	High EDEXP Low	Third Order: Odds Ratios	Female vs. Male by RACE	Black vs. White by SEX	Overall (4 variable) Odds Ratio
	1.45	(BF) (LP1)		1.08	(BF)				
	1.57	(BF) (HP1)					1.00(B)	0.57(F)	
	1.02	(BM) (LP1)		1.08	(BM)				
A=PAT 1	1.11	(BM) (HP1)							1.00
	0.64	(WF) (LP1)		1.88	(WF)				
	1.20	(WF) (HP1)					1.00(W)	0.57(M)	
	1.38	(WM) (LP1)		1.88	(WM)				
	2.60	(WM) (HP1)							
	1.04	(BF) (LP2)		1.82	(BF)				
	1.89	(BF) (HP2)					1.00(B)	1.00(F)	
	0.70	(BM) (LP2)		1.82	(BM)				
A=PAT 2	1.27	(BM) (HP2)							1.00
	0.57	(WF) (LP2)		1.82	(WF)				
	1.04	(WF) (HP2)					1.00(W)	1.00(M)	
	1.18	(WM) (LP2)		1.82	(WM)				
	2.14	(WM) (HP2)							
	1.06	(BF) (LP3)		1.80	(BF)				
	1.91	(BF) (HP3)					1.00(B)	1.00(F)	
	0.70	(BM) (LP3)		1.80	(BM)				
A=PAT 3	1.26	(BM) (HP3)							1.00
	0.66	(WF) (LP3)		1.80	(WF)				
	1.20	(WF) (HP3)					1.00(W)	1.00(M)	
	1.24	(WM) (LP3)		1.80	(WM)				
	2.23	(WM) (HP3)							

(B) = Black (F) = Female
(W) = White (M) = Male
EDEXP = Educational Expectations
PAT 1 = Parental Achievement Training 1
PAT 2 = Parental Achievement Training 2
PAT 3 = Parental Achievement Training 3

LP1 = Low PAT 1
HP1 = High PAT 1
LP2 = Low PAT 2
HP2 = High PAT 2
LP3 = Low PAT 3
HP3 = High PAT 3

times greater for those respondents who had perceived high parental training than those who had perceived low parental training. The odds for the black males and females on the first parental achievement training variable was 1.08. This indicates that those black males and females who perceived high levels of parental training were slightly more likely to have high educational expectations than those who perceived low levels of parental training.

Continuing the influence of parental training on expectations, Proposition V and hypotheses 13 and 14 were stated as follows:

PROPOSITION V: Parental independence training practices will be influenced by sex and race of respondent.

Hypothesis 13: There will be no difference in level of educational and occupational expectations for different levels of independence training for males and black females.

Hypothesis 14: For white females, the level of educational and occupational expectations will increase as independence training practices increase.

Support was provided for hypothesis 13 for both educational and occupational expectations (Table 26). The second order odds ratios, indicating the relationship between the independence training variable and each expectation variable, all suggest that these variables were independent of each other (odds ratio = 1.00). At the same time, these odds ratios did not support hypothesis 14 since the odds for white females were also 1.00.

While these odds ratios indicated that different levels of independence training do not change educational and occupational expectations for any group, each group was influenced by independence training differently. Black females were 1.41 times as likely to have high

Table 26. Odds Ratios for Parental Independence Training Variable with Educational and Occupational Expectations

VARIABLE	First Order: Odds Ratio	High A Low	Second Order: Odds Ratio	High INDEP Low	High A Low	Female SEX Male	High A Low	Black RACE White	High A Low	Third Order: Odds Ratio		Overall (4 variable) Odds Ratio
A=EDEXP	1.51	(BF) (LI)		1.00	(BF)	1.41	(B) (LI)	1.78	(F) (LI)	1.00	(B) or (F)	1.00
	1.51	(BF) (HI)						1.78	(F) (HI)			
	1.06	(BM) (LI)		1.00	(BM)	1.41	(B) (HI)	0.62	(M) (LI)	2.86	(B) vs. (W) or (F) vs. (M)	
	1.06	(BM) (HI)						0.62	(M) (HI)			
	0.85	(WF) (LI)		1.00	(WF)	0.50	(W) (LI)			1.00	(W) or (M)	
	0.85	(WF) (HI)										
	1.70	(WM) (LI)		1.00	(WM)	0.50	(W) (HI)					
	1.70	(WM) (HI)										
A=OCCEXP	1.26	(BF) (LI)		1.00	(BF)	1.87	(B) (LI)	0.73	(F) (LI)	All	1.00	1.00
	1.26	(BF) (HI)						0.73	(F) (HI)			
	0.67	(BM) (LI)		1.00	(BM)	1.87	(B) (HI)	0.73	(M) (LI)			
	0.67	(BM) (HI)						0.73	(M) (HI)			
	1.72	(WF) (LI)		1.00	(WF)	1.87	(W) (LI)					
	1.72	(WF) (HI)										
	0.92	(WM) (LI)		1.00	(WM)	1.87	(W) (HI)					
	0.92	(WM) (HI)										

(B) = Black (F) = Female LI = Low INDEP
(W) = White (M) = Male HI = High INDEP
EDEXP = Educational Expectations
OCCEXP = Occupational Expectations
INDEP = Parental Independence Training

educational expectations as black males for the same level of parental independence training. High educational expectations were half as likely for white females as white males for the same level of parental independence training. For occupational expectations, females were 1.87 times as likely to have high expectations as were males for the same level of parental independence training. Black females were 1.78 times as likely to have high educational expectations as white females for the same level of parental independence training, while black males were 0.62 times as likely as white males. Blacks, whether male or female, were 0.73 times as likely to have high occupational expectations as were whites regardless of level of parental independence training.

Out of the theoretical position that there are differences in the authority relationship between parents and their children depending on the race and sex of the child, the following proposition and hypotheses were derived:

PROPOSITION VI: Parent-child authority relationships will be influenced by race and sex of the respondent.

Hypothesis 15: "Autocratic" parent-child relationships will be greater for white females than white males.

Hypothesis 16: Parent-child authority relationships will not differ for black males and black females.

Hypothesis 17: Parent-child authority relationships will not differ by levels of social origins among white males and blacks.

Hypothesis 18: "Autocratic" parent-child relationships will be greater among low social origin white females than among high social origin white females.

Hypothesis 19: The level of educational and occupational expectations will be higher for respondents reporting a "democratic" parent-child authority relationship than for respondents reporting an "autocratic" relationship.

The results of the tests for hypotheses 15 and 16 are presented in Table 27. Only hypothesis 15 was supported. Briefly, the first order odds ratios were over 1 for the females and less than 1 for the males. This indicated that more than half of each group of females and less than one half of each group of males considered their parents' relationship with them to be autocratic. More precisely, the second order odds ratios, which compared sex and family authority structure, indicated that for whites, females are 1.5 times as likely as males to have considered their relationship with parents to be autocratic. This supported hypothesis 15. But hypothesis 16 was not supported since black females were 2.6 times as likely as black males to have considered their parent-child authority relationship to be autocratic. In fact, the overall odds ratio of 1.7 indicated that blacks were almost twice as likely as whites to have selected an autocratic category for their parent-child authority relationship.

The analysis relevant to hypotheses 17 and 18 is presented in Table 28. While it was hypothesized (hypothesis 17) that white males, black males, and black females would not differ in their perceived authority relationships by level of social origins, in general, the opposite was found. Specifically, the second order odds ratios, which indicated the relationship between father's or mother's education and type of authority relationship, showed that low social origin black females were 1.3 times as likely as high social origin black females to have indicated an autocratic relationship with their parents. The second order odds ratios for both the black and white males were each about 0.75 when either mother's or father's education was used as the measure of social

Table 27. Odds Ratios for Family Authority Structure by Race and Sex

First Order: Odds Ratio	Autocratic FAMAUTH Democratic	Second Order: Odds Ratio	Autocratic FAMAUTH Democratic	Female SEX Male	Autocratic FAMAUTH Democratic	Black RACE White	Overall (3 variable) Odds Ratio
1.94	(BF)		2.58	(B)	1.49	(F)	
0.75	(BM)						1.70
1.30	(WF)		1.52	(W)	0.88	(M)	
0.86	(WM)						

(B) = Black
(W) = White

(F) = Female
(M) = Male

FAMAUTH = Family Authority Structure

Table 28. Odds Ratios for Social Origins with Family Authority Structure

VARIABLE	First Order: Odds Ratio	Autocratic FAMAUTH Democratic	Second Order: Odds Ratio	Low A High	Autocratic FAMAUTH Democratic	Third Order Odds Ratio	Female vs. Male	Black vs. White	Overall (4 variable) Odds Ratio
A=FED	1.68	(BF) (LFA)		1.34	(BF)				1.00
	1.25	(BF) (HFA)					1.82(B)	1.0(F)	
	0.70	(BM) (LFA)		0.74	(BM)				
	0.95	(BM) (HFA)							
	1.68	(WF) (LFA)		1.34	(WF)				
	1.25	(WF) (HFA)					1.82(W)	1.0(M)	
	0.70	(WM) (LFA)		0.74	(WM)				
	0.95	(WM) (HFA)							
A=MED	1.63	(BF) (LMA)		1.30	(BF)				1.00
	1.25	(BF) (HMA)					1.74(B)	1.0(F)	
	0.72	(BM) (LMA)		0.75	(BM)				
	0.95	(BM) (HMA)							
	1.63	(WF) (LMA)		1.30	(WF)				
	1.25	(WF) (HMA)					1.74(W)	1.0(M)	
	0.72	(WM) (LMA)		0.75	(WM)				
	0.95	(WM) (HMA)							
A=FOCC	1.76	(BF) (LFO)		1.54	(BF)				1.00
	1.14	(BF) (HFO)					1.56(B)	1.0(F)	
	0.83	(BM) (LFO)		0.99	(BM)				
	0.84	(BM) (HFO)							
	1.76	(WF) (LFO)		1.54	(WF)				
	1.14	(WF) (HFO)					1.56(W)	1.0(M)	
	0.83	(WM) (LFO)		0.99	(WM)				
	0.84	(WM) (HFO)							
A=MAOCC	1.54	(BF) (LMO)		1.19	(BF)				1.00
	1.29	(BF) (HMO)					1.00(B)	1.0(F)	
	0.90	(BM) (LMO)		1.19	(BM)				
	0.75	(BM) (HMO)							
	1.54	(WF) (LMO)		1.19	(WF)				
	1.29	(WF) (HMO)					1.00(W)	1.0(M)	
	0.90	(WM) (LMO)		1.19	(WM)				
	0.75	(WM) (HMO)							

(B) = Black (F) = Female LFA = Low FED LFO = Low FOCC
(W) = White (M) = Male HFA = High FED HFO = High FOCC
FAMAUTH=Family Authority Structure LMA = Low MED LMO = Low MAOCC
FED = Father's Education HMA = High MED HMO = High MAOCC
MED = Mother's Education
FOCC = Father's Occupation
MAOCC = Mother's Occupation

origin. This suggested that autocratic parent-child relationships were more frequent among high social origin males than among low social origin males. When father's occupation was used as the measure of social origins, low social origin black females were still much more likely (odds = 1.54) than high social origin black females to indicate autocratic relationships. Father's occupation was the only case in which there was no difference in parent-child authority relationships as level of social origin changed, and this was only for the males (odds = 0.99). For mother's occupation as the status measure, the second order odds ratios were all just slightly over 1 (odds = 1.19). This can be interpreted to mean that regardless of sex or race, if a mother worked in the home, the child was 1.2 times as likely to have perceived the family authority relationship to have been autocratic.

No matter what measure of social origin used, low social origin white females were more likely to have perceived an autocratic parent-child relationship than were high social origin white females (range of odds ratios: 1.2 to 1.5). This supported hypothesis 18. It should also be noted that these odds were the same for black and white females resulting in third order odds which compare race of 1.00.

Another interesting observation was made regarding Table 28. The first order odds for each measure of social origin were over 1 for the females and less than 1 for the males regardless of the level of social origin. Following from the results of Table 26, the majority of females continued to view the parental authority relationship as autocratic while the majority of males continued to view this relationship as democratic.

It was hypothesized (hypothesis 19) that "democratic" youth would have higher educational and occupational expectations than "autocratic" youth; instead, the second order odds ratios comparing family authority structure to expectations found no difference between "democratic" and "autocratic" youth regardless of their sex or race (odds = 1.00, Table 29). Thus hypothesis 19 was not supported.

The seventh proposition tested concerned the relationship of maternal employment for educational and occupational expectations of the respondents. This proposition and its derived hypotheses were as follows:

PROPOSITION VII: Maternal employment will influence educational and occupational expectations differently by race, sex, and social origins.

Hypothesis 20: Maternal employment will increase educational and occupational expectations of females more than that of males.

Hypothesis 21: Maternal employment will increase educational and occupational expectations of high social origin white females more than it will low social origin white females.

Hypothesis 22: Maternal employment will have no different affect on the educational and occupational expectations of low and high social origin black females.

It was hypothesized (hypothesis 20) that females' educational and occupational expectations would be influenced more by maternal employment than would males. This hypothesis was not supported by the analysis presented in Table 30. The second order odds ratios comparing maternal employment to educational and occupational expectations were the same for all four groups. For educational expectations, respondents who had employed mothers were 1.6 times as likely as those who had mothers who worked in the home to have high educational expectations.

Table 29: Odds Ratios for Family Authority Structure with Educational and Occupational Expectations

VARIABLE	First Order: Odds Ratio	High A Low	Second Order: Odds Ratio	Democratic FAMAUTH Autocratic	High A Low	Black RACE White	High A Low	Female SEX Male	High A Low	Overall (4 variable) Odds Ratio
A=EDEXP	1.51	(BF) (DF)		1.00	(BF)	1.71	(F) (DF)			1.00
	1.51	(BF) (AF)				1.71	(F) (AF)	1.44	(B) (DF)	
	1.05	(BM) (DF)		1.00	(BM)			1.44	(B) (AF)	
	1.05	(BM) (AF)								
	0.88	(WF) (DF)		1.00	(WF)					
	0.88	(WF) (AF)						0.49	(W) (DF)	
	1.79	(WM) (DF)		1.00	(WM)	0.59	(M) (DF)	0.49	(W) (AF)	
	1.79	(WM) (AF)				0.59	(M) (AF)			
A=OCCEXP	1.28	(BF) (DF)		1.00	(BF)	0.72	(F) (DF)			1.00
	1.28	(BF) (AF)				0.72	(F) (AF)	1.89	(B) (DF)	
	0.67	(BM) (DF)		1.00	(BM)			1.89	(B) (AF)	
	0.67	(BM) (AF)								
	1.77	(WF) (DF)		1.00	(WF)					
	1.77	(WF) (AF)						1.89	(W) (DF)	
	0.93	(WM) (DF)		1.00	(WM)	0.72	(M) (DF)	1.89	(W) (AF)	
	0.93	(WM) (AF)				0.72	(M) (AF)			

(B) = Black (F) = Female
(W) = White (M) = Male
FAMAUTH = Family Authority Structure
EDEXP = Educational Expectation

OCCEXP = Occupational Expectation
(DF) = Democratic FAMAUTH
(AF) = Autocratic FAMAUTH

Table 30. Odds Ratios for Maternal Employment with Educational and Occupational Expectations

VARIABLE	First Order: Odds Ratio	High A Low	Second Order: Odds Ratio	High MAOCC Low	High A Low	Female SEX Male	High A Low	Third Order: Odds Ratio	Female vs. Male	Overall (4 variable) Odds Ratio
A=EDEXP	1.25	(BF) (LMO)		1.62	(BF)	1.43	(B) (LMO)		1.00 (B)	1.00
	2.02	(BF) (HMO)				1.43	(B) (HMO)			
	0.87	(BM) (LMO)		1.62	(BM)					
	1.41	(BM) (HMO)								
	0.70	(WF) (LMO)		1.62	(WF)	0.50	(W) (LMO)		1.00 (W)	
	1.14	(WF) (HMO)				0.50	(W) (HMO)			
	1.40	(WM) (LMO)		1.62	(WM)					
	2.27	(WM) (HMO)								
A=OCCEXP	1.15	(BF) (LMO)		1.25	(BF)	1.87	(B) (LMO)		1.00 (B)	1.00
	1.43	(BF) (HMO)				1.87	(B) (HMO)			
	0.61	(BM) (LMO)		1.25	(BM)					
	0.76	(BM) (HMO)								
	1.57	(WF) (LMO)		1.25	(WF)	1.87	(W) (LMO)		1.00 (W)	
	1.96	(WF) (HMO)				1.87	(W) (HMO)			
	0.84	(WM) (LMO)		1.25	(WM)					
	1.05	(WM) (HMO)								

(B) = Black (F) = Female
(W) = White (M) = Male
MAOCC = Mother's Occupation
EDEXP = Educational Expectation

OCCEXP = Occupational Expectation
LMO = Low MAOCC (Housewife)
HMO = High MAOCC (Employed)

Looking at occupational expectations, students with employed mothers are 1.25 times as likely as students with mothers who are housewives to have high occupational expectations. This relationship shows up more clearly in the third order odds ratios presented. These odds were all 1.00 and indicated that mother's occupation did not influence educational or occupational expectations for either blacks or whites when the sexes are compared. To reiterate, hypothesis 20 received no support.

Turning to the influence of social origins, it was hypothesized (hypothesis 21) that maternal employment would influence educational and occupational expectations more for high social origin than low social origin white females. Little support was found for this hypothesis (Tables 31 and 32). For educational expectations, the third order odds ratios, indicating the influence of maternal employment when moving from low to high social origins, had a very small range (.96 to 1.00). With all these odds ratios close to 1, it was not possible to assume that there was any difference in educational expectations for white females with mothers who worked outside the home than for those whose mothers worked in the home (Table 31). For occupational expectations, the third order odds for the same relationship were all 1, which indicated no difference in the influence of maternal employment between low and high social origin white females (Table 32).

It was hypothesized (hypothesis 22) that low and high social origin black females would not differ in the influence of maternal employment on educational and occupational expectations. Table 31 for educational expectations and Table 32 for occupational expectations strongly supported this hypothesis. All the third order odds ratios,

Table 31. Odds Ratios for Social Origins and Maternal Employment with Educational Expectations

VARIABLE	Second Order: Odds Ratio	High MAOCC Low	High EDEXP Low	High A Low	High EDEXP Low	Third Order: Odds Ratio	Female vs. Male	Low A High	Fourth Order: Odds Ratio	Female vs. Male	Overall (5 variable) Odds Ratio
A=FED		(BF) (LFA)	1.58	2.30	(BF) (LMO)		(B) 1.71(LFA)	0.96(BF)			1.00
		(BF) (HFA)	1.65	2.40	(BF) (HMO)		(B) 0.65(HFA)		2.63	(B)	
		(BM) (LFA)	0.93	3.69	(BM) (LMO)			0.36(BM)			
		(BM) (HFA)	2.54	10.12	(BM) (HMO)						
		(WF) (LFA)	1.58	2.30	(WF) (LMO)		(W) 1.71(LFA)	0.96(WF)			
		(WF) (HFA)	1.65	2.40	(WF) (HMO)		(W) 0.65(HFA)		2.63	(W)	
		(WM) (LFA)	0.93	3.69	(WM) (LMO)			0.36(WM)			
		(WM) (HFA)	2.54	10.12	(WM) (HMO)						
A=MED		(BF) (LMA)	1.40	2.89	(BF) (LMO)		(B) 1.00(LMA)	1.00(BF)			1.00
		(BF) (HMA)	1.40	2.89	(BF) (HMO)		(B) 1.00(HMA)		1.00	(B)	
		(BM) (LMA)	1.40	2.89	(BM) (LMO)			1.00(BM)			
		(BM) (HMA)	1.40	2.89	(BM) (HMO)						
		(WF) (LMA)	1.40	2.89	(WF) (LMO)		(W) 1.00(LMA)	1.00(WF)			
		(WF) (HMA)	1.40	2.89	(WF) (HMO)		(W) 1.00(HMA)		1.00	(W)	
		(WM) (LMA)	1.40	2.89	(WM) (LMO)			1.00(WM)			
		(WM) (HMA)	1.40	2.89	(WM) (HMO)						
A=FOCC		(BF) (LFO)	1.57	2.30	(BF) (LMO)		(B) 1.00(LFO)	1.00(BF)			1.00
		(BF) (HFO)	1.57	2.30	(BF) (HMO)		(B) 1.00(HFO)		1.00	(B)	
		(BM) (LFO)	1.57	4.11	(BM) (LMO)			1.00(BM)			
		(BM) (HFO)	1.57	4.11	(BM) (HMO)						
		(WF) (LFO)	1.57	2.30	(WF) (LMO)		(W) 1.00(LFO)	1.00(WF)			
		(WF) (HFO)	1.57	2.30	(WF) (HMO)		(W) 1.00(HFO)		1.00	(W)	
		(WM) (LFO)	1.57	4.11	(WM) (LMO)			1.00(WM)			
		(WM) (HFO)	1.57	4.11	(WM) (HMO)						

(B) = Black
(W) = White
(F) = Female
(M) = Male

MAOCC = Mother's Occupation
FOCC = Father's Occupation
MED = Mother's Education
FED = Father's Education
EDEXP = Educational Expectations

LFA = Low FED
HFA = High FED
LFO = Low FOCC
HFO = High FOCC

LMA = Low MED
HMA = High MED
LMO = Low MAOCC (Housewife)
HMO = High MAOCC (Employed)

Table 32. Odds Ratios for Social Origins and Maternal Employment with Occupational Expectations

VARIABLE	Second Order: Odds Ratio	High MAOCC Low	High OCCEXP Low	High A Low	High EDEXP Low	Third Order: Odds Ratio	Female vs. Male	Low A High	Fourth Order: Odds Ratio	Female vs. Male	Overall (5 variable) Odds Ratio
A=FED		(BF) (LFA)	1.00	1.68	(BF) (LMO)		(B) 1.00(LFA)	1.00(BF)	1.00	(B)	1.00
		(BF) (HFA)	1.00	1.68	(BF) (HMO)		(B) 1.00(HFA)				
		(BM) (LFA)	1.00	3.03	(BM) (LMO)			1.00(BM)			
		(BM) (HFA)	1.00	3.03	(BM) (HMO)						
		(WF) (LFA)	1.00	1.68	(WF) (LMO)		(W) 1.00(LFA)	1.00(WF)	1.00	(W)	
		(WF) (HFA)	1.00	1.68	(WF) (HMO)		(W) 1.00(HFA)				
		(WM) (LFA)	1.00	3.03	(WM) (LMO)			1.00(WM)			
		(WM) (HFA)	1.00	3.03	(WM) (HMO)						
A=MED		(BF) (LMA)	1.00	1.94	(BF) (LMO)		(B) 1.00(LMA)	1.00(BF)	1.00	(B)	1.00
		(BF) (HMA)	1.00	1.94	(BF) (HMO)		(B) 1.00(HMA)				
		(BM) (LMA)	1.00	1.94	(BM) (LMO)			1.00(BM)			
		(BM) (HMA)	1.00	1.94	(BM) (HMO)						
		(WF) (LMA)	1.00	1.94	(WF) (LMO)		(W) 1.00(LMA)	1.00(WF)	1.00	(W)	
		(WF) (HMA)	1.00	1.94	(WF) (HMO)		(W) 1.00(HMA)				
		(WM) (LMA)	1.00	1.94	(WM) (LMO)			1.00(WM)			
		(WM) (HMA)	1.00	1.94	(WM) (HMO)						
A=FOCC		(BF) (LFO)	1.19	1.79	(BF) (LMO)		(B) 0.62(LFO)	1.00(BF)	1.00	(B)	1.00
		(BF) (HFO)	1.19	1.79	(BF) (HMO)		(B) 0.62(HFO)				
		(BM) (LFO)	1.19	2.89	(BM) (LMO)			1.00(BM)			
		(BM) (HFO)	1.19	[illegible].89	(BM) (HMO)						
		(WF) (LFO)	1.19	1.79	(WF) (LMO)		(W) 0.62(LFO)	1.00(WF)	1.00	(W)	
		(WF) (HFO)	1.19	1.7[illegible]	(WF) (HMO)		0.62(HFO)				
		(WM) (LFO)	1.19	2.89	(WM) (LMO)			1.00(WM)			
		(WM) (HFO)	1.19	2.89	(WM) (HMO)						

(B) = Black
(W) = White
(F) = Female
(M) = Male

MAOCC = Mother's Occupation
FOCC = Father's Occupation
MED = Mother's Education
FED = Father's Education
OCCEXP = Occupational Expectations

LFA = Low FED
HFA = High FED
LFO = Low FOCC
HFO = High FOCC

LMA = Low MED
HMA = High MED
LMO = Low MAOCC (Housewife)
HMO = High MAOCC (Employed)

comparing the relationship between maternal employment and educational and occupational expectations for low versus high social origins were 1.00 with the exception of the odds ratios for educational expectations when father's education was used as the measure of social origin (odds = 0.96).

While not hypothesized, it was interesting to note the third order odds ratios for black and white males concerning the influence of maternal employment on educational expectations when father's education was used as the measure of social origins. Maternal employment had 0.36 times the influence on educational expectations for low social origin than high social origin black and white males (Table 31).

The eighth proposition concerned the influence that a broken home had on educational and occupational expectations. This proposition and its derived hypotheses were as follows:

PROPOSITION VIII: The intactness of the family will influence educational and occupational expectations.

Hypothesis 23: High social origin females' (whether black or white) educational and occupational expectations will be greater when the family structure is not intact.

Hypothesis 24: Among low social origin females (whether black or white), no difference in educational and occupational expectations will be found for those who come from intact versus not intact families.

Hypothesis 25: No difference in educational and occupational expectations of males (black or white) will be found between those coming from intact versus not intact families.

Hypothesis 26: Among females from not intact families, educational and occupational expectations will be greater for those females who have working mothers, than for females who do not have working mothers.

For high social origin females, it was hypothesized (hypothesis 23) that educational and occupational expectations would be greater when the family was not intact. In general, the reverse was found (Tables 33 and 34). The findings were identical for black females and white females; therefore, the discussion will only refer to females. Concerning educational expectations, the use of father's and mother's education as the measure of social origin, yielded an odds ratio of 1.8. This indicated that high social origin females from intact families were almost twice as likely as high social origin females from not intact families, to have had high educational expectations. When father's occupation was used as the measure of social origins, the odds ratio was 1.0 indicating no differences between the females from intact and not intact families on educational expectations.

The findings concerning the influence of intactness of the family on occupational expectations were such that for all three measures of social origin no difference was found between high social origin females who came from intact families and those who came from not intact families (odds ratios = 1.00). These results did not support the hypothesis.

Turning to low social origin females, it was hypothesized (hypothesis 24) that there would be no difference in educational and occupational expectations when they differed regarding intactness of the family. This hypothesis was supported for occupational expectations (Tables 33 and 34). The odds ratios were identical to those noted for high social origin females. Therefore, low social origin females from intact families were 1.8 times as likely as those from not intact

Table 33. Odds Ratios for Social Origins and Intactness of Family with Educational Expectations

VARIABLE	Second Order: Odds Ratio	Yes INTACT No	High EDEXP Low	High A Low	High EDEXP Low	Third Order: Odds Ratio	High A Low	Intact vs. Not Intact	Fourth Order: Odds Ratio	Female vs. Male	Overall (5 variable) Odds Ratio
A=FED		(BF) (LFA)	1.80	2.39	(BF) (NI)		1.00(BF)				
		(BF) (HFA)	1.80	2.39	(BF) (I)			1.00(BF)	1.00	(B)	
		(BM) (LFA)	1.00	5.43	(BM) (NI)		1.00(BM)				
		(BM) (HFA)	1.00	5.43	(BM) (I)			1.00(BM)			1.00
		(WF) (LFA)	1.80	2.39	(WF) (NI)		1.00(WF)				
		(WF) (HFA)	1.80	2.39	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LFA)	1.00	5.43	(WM) (NI)		1.00(WM)				
		(WM) (HFA)	1.00	5.43	(WM) (I)			1.00(WM)			
A=MED		(BF) (LMA)	1.80	3.05	(BF) (NI)		1.00(BF)				
		(BF) (HMA)	1.80	3.05	(BF) (I)			1.00(BF)	1.00	(B)	
		(BM) (LMA)	1.00	3.05	(BM) (NI)		1.00(BM)				
		(BM) (HMA)	1.00	3.05	(BM) (I)			1.00(BM)			1.00
		(WF) (LMA)	1.80	3.05	(WF) (NI)		1.00(WF)				
		(WF) (HMA)	1.80	3.05	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LMA)	1.00	3.05	(WM) (NI)		1.00(WM)				
		(WM) (HMA)	1.00	3.05	(WM) (I)			1.00(WM)			
A=FOCC		(BF) (LFO)	1.00	2.33	(BF) (NI)		1.00(BF)				
		(BF) (HMO)	1.00	2.33	(BF) (I)			1.00(BF)	1.00	(B)	
		(BM) (LFO)	1.00	4.15	(BM) (NI)		1.00(BM)				
		(BM) (HFO)	1.00	4.15	(BM) (I)			1.00(BM)			1.00
		(WF) (LFO)	1.00	2.33	(WF) (NI)		1.00(WF)				
		(WF) (HFO)	1.00	2.33	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LFO)	1.00	4.15	(WM) (NI)		1.00(WM)				
		(WM) (HFO)	1.00	4.15	(WM) (I)			1.00(WM)			

(B) = Black
(W) = White
(F) = Female
(M) = Male

INTACT = Intactness of Family
FED = Father's Education
MED = Mother's Education
FOCC = Father's Occupation
EDEXP = Educational Expectations

LFA = Low FED
HFA = High FED
LMA = Low MED
HMA = High MED

LFO = Low FOCC
HFO = High FOCC
NI = Not Intact
I = Intact

Table 34. Odds Ratios for Social Origins and Intactness of Family with Occupational Expectations

VARIABLE	Second Order: Odds Ratio	Yes INTACT No	High OCCEXP Low	High A Low	High OCCEXP Low	Third Order: Odds Ratio	High A Low	Intact vs. Not Intact	Fourth Order: Odds Ratio	Female vs. Male	Overall (5 variable) Odds Ratio
A=FED		(BF) (LFA)	1.00	1.67	(BF) (NI)		1.00(BF)				
		(BF) (HFA)	1.00	1.67	(BF) (I)			1.00(BF)			
		(BM) (LFA)	1.00	3.03	(BM) (NI)		1.00(BM)		1.00	(B)	
		(BM) (HFA)	1.00	3.03	(BM) (I)			1.00(BM)			1.00
		(WF) (LFA)	1.00	1.67	(WF) (NI)		1.00(WF)				
		(WF) (HFA)	1.00	1.67	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LFA)	1.00	3.03	(WM) (NI)		1.00(WM)				
		(WM) (HFA)	1.00	3.03	(WM) (I)			1.00(WM)			
A=MED		(BF) (LMA)	1.00	1.94	(BF) (NI)		1.00				
		(BF) (HMA)	1.00	1.94	(BF) (I)			1.00(BF)			
		(BM) (LMA)	1.00	1.94	(BM) (NI)		1.00		1.00	(B)	
		(BM) (HMA)	1.00	1.94	(BM) (I)			1.00(BM)			1.00
		(WF) (LMA)	1.00	1.94	(WF) (NI)		1.00				
		(WF) (HMA)	1.00	1.95	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LMA)	1.00	1.94	(WM) (NI)		1.00				
		(WM) (HMA)	1.00	1.94	(WM) (I)			1.00(WM)			
A=FOCC		(BF) (LFO)	1.00	2.27	(BF) (NI)		1.00(BF)				
		(BF) (HFO)	1.00	2.27	(BF) (I)			1.00(BF)			
		(BM) (LFO)	1.00	2.27	(BM) (NI)		1.00(BM)		1.00	(B)	
		(BM) (HFO)	1.00	2.27	(BM) (I)			1.00(BM)			1.00
		(WF) (LFO)	1.00	2.27	(WF) (NI)		1.00(WF)				
		(WF) (HFO)	1.00	2.27	(WF) (I)			1.00(WF)	1.00	(W)	
		(WM) (LFO)	1.00	2.27	(WM) (NI)		1.00(WM)				
		(WM) (HFO)	1.00	2.27	(WM) (I)			1.00(WM)			

(B) = Black
(W) = White
(F) = Female
(M) = Male

INTACT = Intactness of Family
FED = Father's Education
MED = Mother's Education
FOCC = Father's Occupation
OCCEXP = Occupational Expectations

LFA = Low FED
HFA = High FED
LMA = Low MED
HMA = High MED

LFO = Low FOCC
HFO = High FOCC
NI = Not Intact
I = Intact

families to have had high educational expectations for the cases where father's and mother's education were used as the status measures. Thus, the hypothesis was not supported. But no differences were found in expectations between the two levels of intactness of families for all three status measures which looked at occupational expectations or for educational expectations when father's occupation was used as the measure of social origins. Therefore, hypothesis 24 received support from these findings.

For males, it was hypothesized (hypothesis 25) that educational and occupational expectations would not differ when males from intact and not intact families were compared. The findings supported this hypothesis (Tables 33 and 34). For black and white males, regardless of measure of social origin used or level of social origin, educational and occupation expectations were the same for those from intact families as for those from not intact families (odds ratio = 1.00).

It was hypothesized (hypothesis 26) that for females from not intact families, those with working mothers would have higher educational and occupational expectations than those females whose mothers did not work. Support was found for this hypothesis (Table 35). Among black females from not intact families, high educational expectations were 1.28 times as likely for those females whose mothers worked outside the home. While this supports the hypothesis, it should be noted that the relationship between maternal employment and educational expectations was 2.22 for those black females from intact families. Stated differently, black females from intact families were 1.73 times as likely as black females from not intact families to have high

Table 35. Odds Ratios for Maternal Employment and Intactness of Family with Educational and Occupational Expectations

VARIABLE	Second Order: Odds Ratio	Yes INTACT No	High A Low	High MAOCC Low	High A Low	Third Order: Odds Ratio	Intact vs. Not Intact	Fourth Order: Odds Ratio	Female vs. Male	Overall (5 variable) Odds Ratio
A=EDEXP		(BF) (LMO)	1.61	1.28	(BF) (NI)	1.73	(BF)			1.00
		(BF) (HMO)	2.79	2.22	(BF) (I)			1.00	(B)	
		(BM) (LMO)	0.90	1.28	(BM) (NI)	1.73	(BM)			
		(BM) (HMO)	1.56	2.22	(BM) (I)					
		(WF) (LMO)	2.52	2.68	(WF) (NI)	0.57	(WF)			
		(WF) (HMO)	1.44	1.53	(WF) (I)			1.00	(W)	
		(WM) (LMO)	1.41	2.68	(WM) (NI)	0.57	(WM)			
		(WM) (HMO)	0.81	1.53	(WM) (I)					
A=OCCEXP		(BF) (LMO)	1.28	1.26	(BF) (NI)	1.00	(BF)			1.00
		(BF) (HMO)	1.28	1.26	(BF) (I)			1.00	(B)	
		(BM) (LMO)	1.28	1.26	(BM) (NI)	1.00	(BM)			
		(BM) (HMO)	1.28	1.26	(BM) (I)					
		(WF) (LMO)	1.28	1.26	(WF) (NI)	1.00	(WF)			
		(WF) (HMO)	1.28	1.26	(WF) (I)			1.00	(W)	
		(WM) (LMO)	1.28	1.26	(WM) (NI)	1.00	(WM)			
		(WM) (HMO)	1.28	1.26	(WM) (I)					

(B) = Black
(W) = White
(F) = Female
(M) = Male

INTACT = Intactness of Family
MAOCC = Mother's Education
EDEXP = Educational Expectations
OCCEXP = Occupational Expectations

LMO = Low MAOCC
HMO = High MAOCC
NI = Not Intact
I = Intact

educational expectations when their mothers work outside the home. For white females from not intact families, high educational expectations were 2.68 times as likely for females who had mothers working outside the home than for those who had mothers working in the home. This relationship was only 1.53 for white females who came from intact families. Therefore, maternal employment influenced white females more when the family was not intact, while the reverse was true for black females. For occupational expectations, black and white females from both intact and not intact families were 1.26 times as likely to have had high occupational expectations when their mothers were employed, which also supported this hypothesis.

The influence of marital and fertility plans on educational and occupational expectations was the concern of the ninth proposition. It and the hypotheses derived from it were stated as follows:

PROPOSITION IX: Marital and fertility plans will have varying influences on educational and occupational expectations for different race and sex groups.

Hypothesis 27: For white females, plans to marry and fertility expectations will vary inversely with educational and occupational expectations.

Hypothesis 28: Age of planned marriage will be positively related to educational and occupational expectations for white females.

Hypothesis 29: Marital and fertility plans will not be related to educational and occupational expectations for males and black females.

It was hypothesized (hypothesis 27) that white females would have lower educational and occupational expectations if they planned to marry and if they planned to have a large number of children. The correlation analysis only weakly supported this (Table 36). The zero

Table 36. Zero Order Correlations for Marriage and Fertility Plans with Educational and Occupational Expectations

	MARRY with EDEXP	MARAGE with EDEXP	FEREXP with EDEXP	MARRY with OCCEXP	MARAGE with OCCEXP	FEREXP with OCCEXP
Black Females	-.063	.108*	.068	.121*	-.102*	-.115*
Black Males	.049	-.048	-.047	.005	-.009	-.021
White Females	-.026	.105*	.022	-.017	.056	.024
White Males	-.006	.024	.005	.007	.011	-.006

*Significant at .05 level

MARRY = Plan to marry or not
MARAGE = Marriage age
FEREXP = Fertility expectations
EDEXP = Educational expectations
OCCEXP = Occupational expectations

order correlations between plans to marry and educational and occupational expectations were not significant but they were in the hypothesized direction. For fertility plans correlated with educational and occupational expectations, the coefficients were not significant nor were they in the hypothesized direction. Therefore, this hypothesis was only weakly supported.

Age at which white females planned to marry was hypothesized (hypothesis 28) to positively vary with both educational and occupational expectations. This was supported only for educational expectations (Table 36). There was a significant, weak correlation (r = .105) between marriage age and educational expectations, which supported this hypothesis. For occupational expectations and marriage age, the correlation was in the hypothesized direction but not significant (significance at .051 level).

While it was hypothesized (hypothesis 29) that marriage and fertility plans of white males, black males, or black females would not be significantly correlated with educational and occupational expectations, for black females, the reverse was found. For black and white males none of the coefficients were larger than .05, and all were non-significant (Table 36). This supported hypothesis 29. But black females were the group for which marriage and fertility plans were most highly correlated with educational and occupational expectations. Marriage age was significantly correlated (r = .108) with educational expectations. All three marriage age and fertility plans variables were significantly correlated with occupational expectations for black females. Interestingly, whether they plan to marry and occupational expectations were positively correlated (r = .121) which indicated that those who planned to marry were likely to have higher occupational expectations. Marriage age was negatively correlated with occupational expectations (= -.102), suggesting that those who planned to marry earlier had high occupational expectations. The black females supported the hypothesis presented for white females, that the lower the fertility expectation, the higher the occupational expectations (r = -.115). To reiterate, hypothesis 29 was supported for the males but not for black females.

These zero-order correlations were controlled for social origins to assure that the original relationships were not spurious. An inspection of these partial correlations showed that no one or combination of social origin variables had any substantial effect on the original correlations. Since it seemed that the relationships between marriage and fertility plans and educational or occupational expectations are not influenced by social class, no discussion of these minor changes has been undertaken. (The tables of these partial correlations are on file in the Department of Sociology).

Notes

1. All calculations were carried out to at least 4 places to the right of the decimal but rounded to only two for ease of presentation. For all log-linear tables, fitted frequencies, i.e., frequencies for the most parsimonius model that still explains the data, and not the raw data frequencies were used in all of the odds ratio calculations. Calculation of odds ratios from expected rather than observed frequencies permits the use of simplification in the raw data which the model has shown to be appropriate (Goodman, 1972; Page, 1977). Analysis tables present numerous odds ratios not necessary for the answering of specific hypotheses. They are merely presented for the interested reader.

2. Following the techniques used by Kasarda and Janowitz (1974) to guard against loss of information by collapsing data into larger categories, data were cross-classified using detailed categories and a number of polytomized and the dichotomized categories. Gamma coefficients and Kendall's Tau were computed for each type of cross-classification. The comparative statistics showed little loss of information when the variables were dichotomized as noted in the "Operationalization of Variables" section.

3. For elaboration of this test, see Blalock, 1960:309-311 and Steel and Torrie, 1960:189-191.

CHAPTER V

SUMMARY, IMPLICATIONS AND LIMITATIONS

The final chapter of this thesis has four objectives. First, a summary of the previous chapter will be presented; second, a discussion of the theoretical and conceptual implications will be put forth; third, a statement of the impact of these findings on past research will be presented; and fourth, a discussion of the limitations of this study and potentials for future research will be suggested.

Summary of Research Findings

The following outline serves as a summary of the major research findings reported in the previous chapter. It acts as an organizing element and as an orientation for the conclusions.

I. **PROPOSITION I:** One's sex will influence the stereotypical sex-appropriate behaviors chosen.

  A. The hypothesis that females would express more interest in social activities than males was only supported for social activities which do not involve sports.

  B. The hypothesis that males would express more interest in competitive activities than females was not supported.

  C. The hypothesis that males would be more interested in challenging situations while females would prefer to complete tasks they had prior success in was supported.

II. PROPOSITION II. Educational expectations will be related to occupational expectations.

A. The hypothesis that higher educational expectations would be associated with higher occupational expectations was supported.

B. The hypothesis that the relationship between educational and occupational expectations would be stronger for males than females was supported for white males compared to both black and white females, but only for black males when contrasted with black females.

C. For the hypothesis that the relationship between educational and occupational expectations would be stronger for black females than white females, the reverse was found.

III. PROPOSITION III. Social origins influence educational and occupational expectations differently by race and sex groups.

A. For the hypothesis that social origins would more strongly affect the educational and occupational expectations of white females than white males, the reverse was found for both educational and occupational expectations.

B. The hypothesis that social origins would not have any different affect on the educational and occupational expectations of black males and black females was only partially supported. When father's education and occupation were the measures of social origin, the hypothesis was not supported. But when mother's education and occupation were the measures of social origin, the hypothesis was supported.

C. The hypothesis that social origins would more strongly affect the educational and occupational expectations of whites than blacks was not supported.

IV. PROPOSITION IV: Parental achievement training patterns will influence educational expectations.

A. The hypothesis that parental achievement training practices would be greater for white males than white females was only supported for the third achievement variable. For the first training variable the reverse was found and for the second no difference between the two groups was found.

B. The hypothesis that there would be no differences in achievement training practices for black males and females was supported only for the second training variable. Females were more likely to perceive high parental training on the first variable, while the reverse was found for the third training variable.

C. The hypothesis that parental achievement training would be positively associated with educational expectations was supported.

V. PROPOSITION V: Parental independence training practices will be influenced by sex and race of respondent.

A. There was no difference in the level of either educational or occupational expectations for different levels of independence training for any of the four race-sex groups.

VI. PROPOSITION VI: Parent-child authority relationships will be influenced by race and sex of the respondent.

A. The hypothesis that "autocratic" parent-child relationships would be greater for white females than white males was supported.

B. For the hypothesis that parent-child authority relationships would not differ for black males and black females, support was not given since black females were more likely to come from "autocratic" parent-child relationships.

C. For the hypothesis that parent-child authority relationships would not differ by level of social origin among white males and blacks, the reverse was found.

D. The hypothesis that "autocratic" parent-child relationships would be greater among low social origin white females than among high social origin white females was supported.

E. The hypothesis that the level of educational and occupational expectations would be higher for respondents reporting a "democratic" parent-child authority relationship than for respondents reporting an "autocratic" relationship was not supported.

VII. PROPOSITION VII: Maternal employment will influence educational and occupational expectations differently by race, sex, and social origins.

A. The hypothesis that maternal employment would increase educational and occupational expectations of females more than that of males was not supported.

B. The hypothesis that maternal employment would increase educational and occupational expectations of high social origin white females more than it would low social origin white females received only partial support for educational expectations and no support for occupational expectations.

C. The hypothesis that maternal employment would have no different affect on the educational and occupational expectations of low and high social origin black females was supported.

VIII. PROPOSITION VIII: The intactness of the family will influence educational and occupational expectations.

A. For the hypothesis that high social origin females' educational and occupational expectations would be greater when the family structure is not intact, the reverse was found.

B. The hypothesis that among low social origin females, no difference in educational and occupational expectations would be found for those who come from intact versus not intact families received only partial support for educational expectations and was supported for occupational expectations.

C. The hypothesis that no difference in educational and occupational expectations of males would be found between those coming from intact versus not intact families was supported.

D. The hypothesis that among females from not intact families, educational and occupational expectations would be greater for those females who have working mothers than for females who do not have working mothers was supported.

IX. PROPOSITION IX: Marital and fertility plans will have varying influences on educational and occupational expectations for different race and sex groups.

A. The hypothesis that plans to marry and fertility expectations would vary inversely with educational and occupational expectations for white females was only partially supported.

B. The hypothesis that age of planned marriage would be positively related to educational and occupational expectations for white females was supported for educational expectations and only partially supported for occupational expectations.

C. The hypothesis that for males and black females, marital and fertility plans would vary independently of educational and occupational expectations was supported for males but not for black females.

Discussion

The previous section summarized the highlights of the empirical analysis. It remains to discuss these findings in terms of the theoretical, conceptual, and empirical literature reviewed in an earlier chapter.

Theoretical Implications

This study has been largely an exploratory one. The primary objective was to empirically examine the topic of familial socialization practices and their influences on educational and occupational expectations. As noted earlier in this study, there has been little sociological research conducted on the significance of parental socialization practices and behavior on the career plans of adolescents. This fact was elaborated in a previous section of this thesis which pointed out that the vast majority of the major empirical studies on adolescent career expectations have been conducted on white males, with several studies comparing this group to black males or white females and very few testing hypotheses for black females. From this limited research, several generalizations have emerged which posit differences in career expectations of males and females, whether black or white, due to family background and socialization practices. The objective of this thesis was an extension of this conceptualization in several directions. First, the analysis was conducted in a manner which allowed for comparisons to be made for black and white males and females. Second, an extension of the analysis was made in terms of adding multiple indicators of family structure, i.e., social origins, intactness of family, and maternal employment; parental socialization practices, i.e., parental achievement training, parental independence training, and parent-child authority relationships; and sex-specific behavioral patterns, i.e., stereotypical sex-appropriate behaviors, and marital and fertility plans.

While lack of information on income and role modeling reduces explanatory ability, the role modeling approach presented in the literature, which stated that identification or imitation of the same-sex parent was important in the development of the adolescent (Bandura and Walters, 1963; Parsons, 1976; Lynn, 1971), is questioned by the findings of this study. The influence of maternal employment, thought to be important for the career plans of females (Almquist and Angrist, 1970; Tangri, 1972; Hoffman, 1974; Broverman, et al., 1972), had similar influences on the educational and occupational expectations of all four race-sex groups (Table 30, p. 121). Further, it was hypothesized that maternal employment would influence females from the middle class more than from the lower class since familial primacy is more actively stressed for women from lower-class origins (Schneider and Smith, 1973). When comparing the influence of maternal employment for different social origin levels, the findings suggest that it is high social origin males, both black and white, who gain the most from maternal employment (Table 31, p. 123). This finding suggests several theoretical possibilities. Perhaps high status social origin mothers, who work outside the home, are providing their sons with "models for self" (Woelfel and Haller, 1971). Rather than providing models of what the male respondents should be through example, they are communicating messages as to how the males should behave in terms of positive self-images. These findings and the theoretical position just defined could be clarified by research on why women are employed (Lipman-Blumen and Thompson, 1976). Another possible explanation relates to family income. The measure of social origins for which these differences were noted was father's education. Since high father's education does not necessarily result in high income, it could be that maternal employment is a means for assuring that males can continue their education. For females, plans for higher education are probably based on the way that education is viewed by the family and the actual family income rather than by parents' background. Possibly the finances for sending a female to college are not the result of maternal employment, while the reverse may be true for males. Therefore, the influence of maternal employment on educational expectations for males could be a result of financial assistance and not necessarily of role modeling. Future research should attempt to deal with these issues by examining the different reasons for female employment, the division of financial resources between male and female children, and the different types of modeling present in the family.

The influence of maternal employment when considered along with the parents' marital relationship provided some support for same-sex role modeling. Maternal employment influenced the educational expectations of whites more when their family was not intact, while the reverse was true for the blacks (Table 35, p. 130). It seems reasonable that within the intact black family the mother is viewed as a positive role model when she is sharing work obligations with the father. If the family is not intact, then the financial obligations may be such that career plans are limited to those which are affordable and which will provide immediate income to the family. For the white respondents from non-intact families, the mother became a positive role model since she had no male to assist with finances. She provided an image of the woman as "doer" (Epstein, 1973) to both her male and female children. While this supports same-sex role modeling for females, it also supports opposite-sex role modeling for males.

The finding that black and white females, but not males, were more likely to have higher educational expectations when their family structure was intact supports opposite-sex role modeling (Table 33, p. 127). When the family is intact, females may have greater opportunities to be influenced by their fathers. High achievement for females has been related to females' perceived similarity to their fathers rather than their mothers (Fogarty et al., 1971; Tangri, 1972; Stockard, 1977). The importance of familial resources must again be discussed. Education is most often viewed as an end in itself for females. Having not been divided into two households, those families which are intact are more likely to have the resources for higher education available to females. Therefore, it would seem that the females from intact families would have higher educational expectations than those from non-intact families. But since for females higher occupational expectations are not necessarily the result of higher educational expectations, the relationship between intactness of the family and occupational expectations should not differ. This was the finding of this study. Further research should attempt to separate the resources issue from the influence of paternal modeling.

These findings failed to support several of Parsons' theoretical notions discussed in previous chapters. The increased educational expectations associated with maternal employment suggest that Parsons' notion of the complementarity of the maternal role (i.e., satisfying the expressive needs of the family) and the paternal role (i.e., satisfying the instrumental needs of the family) are not borne out in the intact black family or the non-intact white family. The finding that whether one was from an intact or non-intact family made no difference in educational and occupational expectations for any of the race-sex groups supported the works of Yarrow (1964), while rejecting Parsons' contention that both parents are necessary for proper achievement socialization.

The influence of marital and fertility plans on educational and occupational expectations of white and black females has implications for theoretical approaches advanced by Falk and Cosby (1975), Caplow (1954), Psathas (1968), and Matthews and Tiedeman (1964). All of these theorists viewed marriage and fertility plans as limiting factors for the career plans of females. As was anticipated, marital and fertility plans were not related to educational and occupational expectations for males. For white females, educational expectations were influenced by marital plans. There was a statistically significant positive correlation between marriage age and educational expectations. A similar positive relationship was found for black females. The occupational expectations of black females were significantly influenced by all three marital and fertility variables. Those who planned to marry at all, and those who planned to marry early had higher occupational expectations which contradicts the conceptualizations in the above works that these plans were limiting factors for all females. The "well-socialized" white American girl regards marriage and motherhood as her most salient role (Weitzman, 1975; Epstein, 1973). While the emphasis for the black woman is also on her familial role, she may regard occupational commitment as a necessary part of that role. The black woman knows that she must continue working in order to assure her family an adequate life style in a society in which her husband's position is always marginal (Epstein, 1973).

For white women, motherhood has assured housewife status at least until children enter school. However, black families cannot place such demands on the income potential of the wife (Epstein, 1973). It seems plausible that black women are aware of the importance of employment for their future roles as wives and mothers. "If the black woman acts like a [white] woman occupationally, she is failing as a mother in helping her family" (Epstein, 1973:926). Apparently, marriage and even early marriage acts as an incentive for the black female to improve her occupational prestige.

Since none of the marital plan variables were correlated with occupational expectations of the white females at a statistically significant level, it appears that these respondents have given little thought toward how marriage and fertility expectations may restrict career expectations. Perhaps white females are still in what Ginzberg (1951) called the "tentative stage" of career development in that the realities of the potential impact of marriage and a family on career plans have not yet crystalized. This suggests that marital and fertility plans have limited applicability for white females when research is cross-sectional and concerned only with occupational expectations. The positive correlation of marriage age and educational expectations supports the previously noted theories. But at least for black females, the theoretical position concerning the influence of marriage on occupational expectations must be reworked to contain the possibility that these plans could lead to higher occupational achievement.

While Matthews and Tiedeman (1964) suggest that there is an additional conflict between the traditional role of wife and mother and the career-oriented role, our findings do not suggest such conflict. Over ninety-five per cent of both the black and white females plan to marry and more than half of each group has high occupational expectations. No specific question asking if they plan to pursue both types of careers was asked, but it appears that dual careers as wives, mothers, and employees are the norm. This is particularly true for the black females on the basis of the negative correlations between marriage age and occupational expectations just discussed. With two competing ideologies at work, one which stresses the importance of an outside career for women and the other which believes that a woman's place is in the home, it is perhaps easiest for females to expect to have dual careers. It is better to accept the tremendous energy requirement associated with dual careers than to face the social stigma of not fulfilling one of these roles. If one chooses to remain in the home, one is told that she has no identity of her own. While if one opts not to marry, then she faces the social stigma of not fulfilling the traditional role of wife and mother. It appears that women are placing their femininity in jeopardy by taking only one of these two options. Thus, the seventeen-year-old female probably finds it easier to plan to do both. However, black females appeared to be most aware of the negative consequences of expecting to fulfill both roles. Perhaps because they have more often lived within a family in which their mothers have fulfilled both roles, they are more cognizant of the consequences.

The positive correlations between educational and occupational expectations also suggested that females plan dual careers. The correlation for the white females was statistically and substantively larger than that for the black females. Recalling that the mean educational expectations of the black females were higher than those of the white females, while the reverse was found for occupational expectations, several theoretical possibilities emerge. Perhaps black females believe that the social structure will allow them to achieve educationally, but that discrimination and racism will restrict occupational attainment. In fact, while black women have more education than black men, they continue to remain at the bottom of the occupational and income structure (Epstein, 1973:913-915). Further, it has been found that blacks are less likely than whites to translate their educational aspirations into attainment (Cosby and Picou, 1975). Possibly this limitation is also true for expectations. In other words, educational expectations are less realistic than occupational expectations for black females. This suggests that females may become frustrated when they do not realize their educational expectations. Perhaps this will result in a stronger emphasis on education for their own daughters or a reduction in their expectations for their daughters.

Conceptual Implications

The implications of these findings for concept development centers around the concept of sex roles. Sex differences were found for all three of the stereotypical sex-appropriate behavior variables; however, the pattern of variation did not support all the hypotheses. While it was found that females were more social than males on the variable concerned with working with others, both variables dealing with athletic activities showed no difference between the sexes. Further conceptualizations of social behavior should concern themselves with situationally specified meanings of behavior as the achievement motivation literature has been forced to do regarding the influence on achievement motivation of the alteration of cues (Katz and Medrick, 1973; Stoll, 1974). It seems that when athletics are the cue, the social dimension of the question takes on an equivalent meaning for males and females resulting in each group being equally likely to choose the social category. For the competitive variables, it was found that females were more likely to choose the competitive dimension than the males, the reverse of the hypothesis. While the females preferred everyone to be about the same, this could be an indication of "fear of success" (Horner, 1972). The males much preferred those situations in which they were better than everyone else. Ostensibly, this may be a good measure of achievement motivation when it is scored the opposite of the way it has been scored previously (Mehrabian, 1968).

For all four race-sex groups, on each variable used to measure stereotypical sex-appropriate behavior, the first order odds ratios were all in the same direction indicating that one category was more popular for all groups (i.e., the odds ratios for the social variables were all greater than 1 implying that the social category was more popular for all four groups). The findings support the conceptualization of sex-roles of males and females as overlapping normal distributions, such that the differences within groups are at least as large as the differences between groups (Chafetz, 1974; Bem, 1974; Pleck, 1976).

Implications for Past Research

The findings of this thesis are relevant to past studies on the educational and occupational projections of adolescents which have made comparative analyses by sex and race, and which have dealt with parental socialization variables. Different statistical techniques from those used in this thesis were used for many of these studies, suggesting that some of the differences noted may be attributed to the varying techniques. But these differences are often large enough to suggest the need for further research.

The findings of this study diverge from those of past empirical analyses which found that nonwhite racial status (Carter and Picou, 1975; Kerckhoff and Campbell, 1977) and female sex (Alexander and Eckland, 1974; Treas, 1976) had depressant effects on achievement. This study used educational and occupational expectations as proxies for achievement. Being a white female or a black male resulted in low educational expectations but black females were close to white males in terms of frequency of having high educational expectations. In fact, regardless of social origins, the black female was more likely to have high than low educational expectations. This finding has definite implications for future theoretical and empirical development in this area. Researchers interested in determining why the educational expectations of black females are not reduced as greatly as those of black males or white females should attempt to isolate the determinants of academic achievement motivation for black females.

For occupational expectations, the females have higher expectations than the males. But the males display more diversity in their occupational choices, supporting past research which suggests that the occupational structure is segregated by sex in a way that concentrates females into a limited number of occupations (Gross, 1968; Knudsen, 1969; Epstein, 1970b), which are scored relatively high on traditional status indicators of occupation.

The findings concerning sex differences in the frequency of choice of a category on several of the parental achievement variables, are consistent with past literature. The variable dealing with frequency of parental reward for successful task performance indicated that females were more likely to perceive high levels of reward than males. Ostensibly, females are more dependent on others for feelings of affirmation (Baumrind, 1975; Stoll, 1974). Parental stress on pride and independence seemed to be very similar for both groups. While parental stress on pride did not differ by sex, it seems that parental stress on independence should be greater for males than females. However, independence training played no significant role for either educational or occupational expectations. This finding supports earlier works (Rosen and D'Andrade, 1959; McClelland, 1961; Rehberg et al., 1970) which suggests that parental achievement training rather than independence training influenced achievement behavior.

The findings of this study both converge with and diverge from those of past empirical analyses conducted on the influences of parental socialization practices on achievement motivation of adolescents. The relationship between the three parental achievement training variables and educational expectations was positive, supporting the earlier works of Rosen and D'Andrade (1959) and Rehberg et al., (1970). These same researchers found that for males the excessive demands associated with nondemocratic parental socialization patterns were negatively correlated with achievement. For both males and females, the findings of this study indicate educational expectations are the same for both types of family authority structure (Table 29, p. 118). Therefore, the findings of this study diverged from those of past research on the influence of family authority on educational expectations.

Comparing the frequency of each type of family authority structure, it was found an autocratic parent-child relationship was more common for females than males and particularly for lower social origin females, regardless of race (Tables 27 and 28, pp. 116-117). This supports prior research that has found that parents are more protective of their daughters (Hoffman, 1972). Schneider and Smith (1973) stated that authority is traditionally associated with the male in the lower class. Perhaps by the time the lower class males are seventeen, they have broken away from their fathers' authority and begun to establish their own authority. But it appears that the females are still under the autocratic control of their fathers. The findings of this thesis supported this position.

Prior research has suggested that social origins are more important for the educational and occupational plans of white females than white males (Cosby and Picou, 1975; Alexander and Eckland, 1974; Sewell and Shah, 1967) and less important for blacks than whites (Duncan, 1968; Carter and Picou, 1975; Cosby and Picou, 1973). The findings of this study contradict these patterns. Father's background more strongly influenced the educational and occupational expectations of males than females, regardless of race. For both race groups, educational and occupational expectations were the same for different levels of mother's background in comparing males and females. While blacks were more likely to have high educational expectations when compared with whites, this relationship remained the same for different levels of social origins. These findings seem to support Sewell and Shah's (1968a) findings that among high SES students, males were more likely to have high educational plans than females. Several other status attainment studies have found patterns that do not fully support past research (Hout and Morgan, 1975; Picou and Howard, 1976). Many of the studies which are at variance with the findings of this thesis used a composite index of social origins. This could explain some of the difference in results. Since the sample for this thesis is representative of an entire state, past research may have found a more rigid stratification system for women due to biases introduced by sampling for convenience. However, these findings suggest that status transmission is a complex process which may contain structural factors other than social origins. Further research should consider the influences of variations in community economic structure that could create restricted labor markets which orient the young to specific educational and occupational models on the basis of geographical location (Elder, 1975).

Limitations and Suggestions for Future Research

Implications derived from this thesis should be viewed as tentative until additional comparative research detailing the influences of family background on educational and occupational plans is available. The sample employed in this study was limited to adolescents residing in only one southern state; therefore, generalizations should be restricted. Furthermore, the findings of this thesis are limited to black and white males and females who were high school seniors in the fall of 1970. Since many changes have taken place regarding the roles of men and women as well as blacks and whites in America in the past eight years, the results of this study may be timebound.

The failure of this study to incorporate data on educational and occupational achievement is a limitation. It is suggested that future studies in this area should be longitudinal so as to include information on actual career achievements in order to adequately evaluate parental influences on educational and occupational achievement. The need for longitudinal research is important for all career choice studies since it is an oversimplification to consider that these decisions are made at one point in time. Rather, numerous choice periods should be analyzed to determine how earlier choices limit or extend future career options (Psathas, 1968). Further, it is suggested that future studies include information on parental socialization patterns which have been collected from the parents so as to enable the comparison of parents' and respondents' perceptions.

Another area of possible research would be to include questions that separate parental socialization patterns for fathers and mothers. Previous research has found differences between parents which result in differing achievement behavior for males and females (Rehberg et al., 1970; Baumrind, 1975).

The operationalization of mother's occupation into only two categories, one for those mothers who worked at home and the other for those mothers who were employed outside the home, was another limiting factor of this study. The limited effect of maternal employment on educational and occupational expectations may be partially explained by this limitation. Future studies should collect data concerning the reasons why a woman is working, how her family feels about her working, periods in the childrearing years when she worked, and the degree of commitment she feels toward employment outside the home. This type of data would provide more precise information on how different types of maternal employment influence socialization outcomes and specifically career plans.

Turning to father's occupation and occupational expectations, several limiting factors can be mentioned. Previous coding resulted in this information being limited to prestige scores. Further research among these four race-sex groups would be more useful if occupational categories (such as blue-collar, white collar, traditionally female, traditionally male, etc.) were used. This is also a possibility for mother's occupation (Burlin, 1976). Another possible way to conceptualize these occupational classifications is through the use of Marxian class categories as presented by Wright and Perrone (1977). An attempt was made to utilize this procedure in this research, but not enough information was available on the questionnaires. This method looks at the position of a worker within the social relations of production, rather than placing them within occupational groupings. It would be interesting to look at occupational expectations and aspirations of blacks and women in terms of their desires and expectations for positions in the social relations of the means of production.

There are numerous limitations to this research as a result of the narrow conceptualization and measurement of occupational and educational expectations. While education is a means to occupational attainment for males and some females, other females may view it as an end in itself, while others as a means to securing a successful husband through which to fulfill their ambitions. Occupational plans may also be viewed in a similar manner for females. Some women have occupational goals which are primary, while others consider these as secondary to marital and fertility goals, and others may have no occupational goals of their own but goals for their future husband. Future research should attempt to tap the different dimensions of ambition for females.

Another potential research area arising out of this thesis concerns the potential frustrations associated with being a young woman in American society today. The findings suggested that both the black and white women were planning dual careers. It was also pointed out that regardless of whether a woman chose to work only in the home, to have a full-time career, or to combine both, there could be potential role conflict. Future longitudinal research should be conducted on the frustrations and conflict associated with all three of these options. An attempt should be made to determine which groups are undergoing the greatest physical and psychological stresses.

Another limitation of this study is restricted knowledge on parents' marital status. Questions arise as to whether the respondent is living with his/her mother or father, how long the parents have been separated, the quality of the parental relationship within the intact family, and response errors with regard to parents who have divorced and remarried (i.e., is the step father always treated as the father?).

Another possible limiting factor to looking at the intactness of the family, is the difference between those families broken by divorce of a parent. Another interesting possibility for further research is to look at the impact on children of the absence of a father due to demanding work and commuting schedules. While much has been written about the damage to black children when the father is absent, no inferences have been made about middle class white fathers who are absent due to work demands (Hareven, 1976).

The lack of blacks who had high parental occupational and educational levels was another limitation of this research. While the analysis was completed with the small sample, further research should attempt to oversample blacks to allow for more reliability in making statements about the differences between low and high social origin whites and blacks.

Finally, the major statistical technique used in this thesis was Goodman's log linear analysis. The necessity of dichotomizing all the variables for this analysis may have limited our ability to infer from this analysis to those which have used interval level data and regression analysis. The inferences are particularly suspect with regard to father's occupation and occupational expectations since these are considered to be quasi-interval. While this dichotomization is a limitation, the importance of being able to supply a parsimonious numerical presentation of the interactions between the race-sex groups and the intervening and dependent variables supports its use. Also, the previous discussion of the conceptualization of occupation suggests that all the status attainment literature is limited in its usefulness for female attainment due to the complexity of this process. While future research should attempt to replicate this study through the use of log linear analysis, they should strive to introduce measures of occupational categorization that allow for female ambition to be more successfully analyzed.

REFERENCES

Albrecht, Stan L., Howard M. Bahr, and Bruce A. Chadwick
1977 "Public stereotyping of sex roles, personality characteristics, and occupations." Sociology and Social Research 61:223-40.

Alexander, Karl L. and Bruce K. Eckland
1974 "Sex differences in the educational attainment process." American Sociological Review 39:668-82.

Almquist, Elizabeth and Shirley S. Angrist
1970 "Career salience and a typicality of occupational choice among college women." Journal of Marriage and the Family 32:242-49.

Alper, Timothy G.
1974 "Achievement motivation in college women: a now-you-see-it-now-you-don't-phenomena." American Psychologist 29: 194-203.

Althus, William D.
1965 "Birth order and academic primogeniture." Journal of Personality and Social Psychology 2:872-76.

Anderson, Charles H.
1974 Toward a New Sociology. Revised Edition. Homewood, Illinois: The Dorsey Press.

Aronoff, Joel and William D. Crano
1975 "A re-examination of the cross-cultural principles of task segregation and sex role differentiation in the family." American Sociological Review 40:12-20.

Astin, Helen S.
1968 "Career development of girls during the high school years." Journal of Counseling Psychology 15:536-40.

Astin, Helen S. and Thomas Myint
1971 "Career development of young women during the post-high school years." Journal of Counseling Psychology 18:369-93.

Axelson, Leland J.
1970 "The working wife: differences in perception among Negro and white males." Journal of Marriage and the Family 32: 457-64.

Bandura, Albert
1965 "Influence of model's reinforcement contingencies on the acquisition of imitative responses." Journal of Personality and Social Psychology 1:589-95.

Bandura, Albert and Richard H. Walters
1976 "Theories of identification and exposure to multiple models." Pp. 423-33 in P. C. Lee and R. S. Steward (eds.), Sex Differences: Cultural and Developmental Dimensions. New York: Urizen Books.

Bardwick, Judith M. and Elizabeth Douvan
1971 "Ambivalence: the socialization of women." Pp. 147-59 in V. Gornick and K. Moran (eds.), Women in Sexist Society. New York: Basic Books.

Baumrind, Diana
1975 "Early socialization and adolescent competence." Pp. 117-46 in S. E. Dragastin and G. H. Elder, Jr. (eds.), Adolescence in the Life Cycle: Psychological Change and Social Context. New York: Wiley.

Bayer, Alan E.
1969 "Marriage plans and educational aspirations." American Journal of Sociology 75:239-44.

Bem, Sandra L.
1974 "The measurement of psychological androgyny." Journal of Consulting and Clinical Psychology 42:155-62.

1975 "Sex role adaptability: one consequence of psychological androgyny." Journal of Personality and Social Psychology 31:634-43.

Bem, Sandra L. and Daryl J. Bem
1970 "Case study of a nonconscious ideology: training the woman to know her place." Pp. 89-99 in Daryl J. Bem, Beliefs, Attitudes and Human Affairs. Belmont, California: Brooks/Cole.

Bernard, Jessie
1971 Women and the Public Interest. Chicago: Aldine.

Bishop, Yvonne M., Stephen E. Fienberg, and Paul Holland
1975 Discrete Multivariate Analysis. Cambridge, Mass.: MIT Press.

Blalock, Herbert M., Jr.
1960 Social Statistics. New York: McGraw-Hill Book Company.

Blau, Francine D.
1975 "Women in the labor force: an overview." Pp. 211-26 in J. Freeman (ed.), Women: A Feminist Perspective. Palo Alto, California: Mayfield.

Blau, Peter M. and Otis D. Duncan
1967 The American Occupational Structure. New York: Wiley.

Blood, Robert O., Jr. and Donald M. Wolfe
1960 Husbands and Wives: The Dynamics of Married Living. New York: Free Press.

Blumer, Herbert
1969 Symbolic Interactionism: Perspective and Method. Englewood Cliffs, New Jersey: Prentice-Hall.

Borker, Susan and Julia Loughlin Makarushka
1977 "Marital status, early childrearing and income achievement of mature women." Paper presented at The American Sociological Association meeting in Chicago.

Brim, Orville G., Jr.
1960 "Personality development as role learning." Pp. 127-59 in I. Iscoe and H. Stevenson (eds.), Personality Development in Children. Austin, Texas: University of Texas Press.

Broverman, Inge K., Susan R. Vogel, Donald M. Broverman, Frank E. Clarkson, and Paul S. Rosenkrantz
1972 "Sex role stereotypes: a current appraisal." Journal of Social Issues 28:59-78.

Burlin, Francis-Dee
1976 "The relationship of parental education and maternal work and occupational status to occupation aspiration in adolescent females." Journal of Vocational Behavior 9:99-104.

Caplow, Theodore
1954 The Sociology of Work. New York: McGraw-Hill.

Carlson, Kenneth
1972 "Equalizing educational opportunity." Review of Educational Research 42:453-75.

Carter, Nancy D.
1972 The Effects of Sex and Marital Status on a Social-Psychological Model of Occupational Status Attainment. Unpublished Master of Science Thesis. University of Wisconsin.

Carter, T. Michael and Nancy D. Carter
1971 "Status attainment vs. social mobility: alternative or complementary modes of stratification research?" LSU Journal of Sociology 2:12-33.

Carter, T. Michael and J. Steven Picou
1975 "Status attainment theory and black male youth." Pp. 23-40 in J. S. Picou and R. E. Campbell (eds.), Career Behavior of Special Groups: Theory, Research and Practice. Columbus, Ohio: Charles E. Merrill.

Centers, Richard
1949 The Psychology of Social Classes. Princeton, New Jersey: Princeton University Press.

Chafetz, Janet Saltzman
1974 Masculine/Feminine or Human?: An Overview of the Sociology of Sex Roles. Itasca, Illinois: Peacock.

Clarke, Robert B., Arthur P. Coladarci and John Caffrey
1965 Statistical Reasoning and Procedures. Columbus, Ohio: Charles E. Merrill.

Clignet, Remi
1974 Liberty and Equality in the Educational Process: A Comparative Sociology of Education. New York: Wiley.

Cohen, Lawrence E. and James R. Kluegel
1978 "Determinants of juvenile court dispositions: ascriptive and achieved factors in two metropolitan courts." American Sociological Review 43:1[illegible]2-76.

Coleman, James
1968 "The concept of equality of educational opportunity." Harvard Educational Review 38:7-22.

Coleman, James S., Ernest Q. Campbell, Carol J. Hobson, James McPartland, Alexander M. Mood, Frederic D. Weenfield, and Robert L. York
1966 Equality of Educational Opportunity. Washington, D.C.: U. S. Government Printing Office.

Collins, Randall
1971 "Functional and conflict theories of educational stratification." American Sociological Review 36:1002-19.

Cooley, Charles Horton
1972 "Looking glass self." Pp. 231-33 in J. G. Manis and B. N. Meltzer (eds.), Symbolic Interaction: A Reader in Social Psychology. 2nd Edition. Boston: Allyn and Bacon.

Cosby, Arthur G. and J. Steven Picou
1973 "Structural models and occupational aspirations: black-white variations among deep-south adolescents." Journal of Vocational Behavior 3:38-50.

1975 "Models of transmission of educational status: sex-race differentials." Paper presented at the Rural Sociology Section of the SAAS Meetings in New Orleans, Louisiana.

Coser, Lewis A. and Bernard Rosenberg
1964 Sociological Theory: A Book of Readings. 2nd Edition. New York: The Macmillan Company.

Coser, Rose Laub and Gerald Rokoff
1971 "Women in the occupational world: social disruption and conflict." Social Problems 18:535-54.

Curry, Evans W. and J. Steven Picou
1971 "Rural youth and anticipatory occupational goal deflection." Journal of Vocational Behavior 1:136-49.

Davis, James A.
1964 Great Aspirations. Chicago: Aldine.

1971 Elementary Survey Analysis. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

1974 "Hierarchical models for significance tests in multivariate contingency tables: an exegesis of Goodman's recent papers." Pp. 189-231 in H. L. Costner (eds.), Sociological Methodology. San Francisco: Jossey-Bass Publishers.

Doherty, Mary A.
1973 "Sexual bias in personality theory." The Counseling Psychologist 4:67-75.

Douglas, Jack D.
1973 Introduction to Sociology: Situations and Structures. New York: Free Press.

Duberman, Lucile
1975 Gender and Sex in Society. New York: Praeger.

Duncan, Otis Dudley
1961 "A socio-economic index for all occupations." Pp. 109-38 in A. J. Reiss, Jr. (ed.), Occupations and Social Status. New York: Free Press.

1968 "Inheritance of poverty or the inheritance of race?" Pp. 84-98 in D. P. Moynihan (ed.), On Understanding Poverty. New York: Basic Books.

Duncan, Otis Dudley, Archibald O. Haller and Alejandro Portes
1968 "Peer influences on aspirations: a reinterpretation." American Journal of Sociology 74:119-37.

Edwards, John N. and David L. Klemmack
1973 "Birth order and the conservators of tradition hypothesis." Journal of Marriage and the Family 35:619-26.

Elder, Glen H.
1962 Adolescent Achievement and Mobility Aspirations. Chapel Hill, North Carolina: Institute for Research in Social Science.

1965 "Family structure and educational attainment." American Sociological Review 30:81-96.

1968 "Achievement motivation and intelligence in occupational mobility: a longitudinal analysis." Sociometry 31:327-54.

1975 "Adolescence in the life cycle: an introduction." Pp. 1-22 in S. E. Dragstin and G. H. Elder, Jr. (eds.), Adolescence in the Life Cycle: Psychological Change and Social Context. New York: Wiley.

Elkins, Frederick
1966 The Child and Society: The Process of Socialization. New York: Random House.

Epstein, Cynthia Fuchs
1970a Woman's Place: Options and Limits in Professional Careers. Berkeley: University of California Press.

1970b "Encountering the male establishment: sex status limits on women's careers in the professions." American Journal of Sociology 75:965-82.

1973 "Positive effects of the multiple negative: explaining the success of black professional women." American Journal of Sociology 78:912-35.

Epstein, Gilda F. and Arline L. Bronzaft
1972 "Female freshmen view their roles as women." Journal of Marriage and the Family 34:671-72.

1974 "Female modesty in aspiration level." Journal of Counseling Psychology 21:57-60.

Erikson, Eric H.
1950 Childhood and Society. New York: Norton.

Falk, Gail
1975 "Sex discrimination in the trade unions: legal resources for change." Pp. 254-76 in J. Freeman (ed.), Women: A Feminist Perspective. Palo Alto, California: Mayfield.

Falk, William Warren
1975 "School desegregation, mobility attitudes, and early attainment of rural, black youth." Unpublished Doctoral Dissertation, Texas A&M University, College Station, Texas, August.

Falk, William W. and Arthur G. Cosby
1975 "Women and the status attainment process." Social Science Quarterly 56:307-14.

Ferber, Marianne Abels and Joan Althaus Huber
1975 "Sex of students and instructor: a study of student bias." American Journal of Sociology 80:949-63.

Fienberg, Stephen E.
1970 "The analysis of multidimensional contingency tables." Ecology 51:419-33.

Fogarty, Michael, Rhona Rapaport, and Robert N. Rapaport
1971 Sex, Career, and Family. London: George Allen and Unwin.

Freeman, Jo
1970 "Growing up girlish." Trans-action 8:36-43.

1975 "How to discriminate against women without really trying." Pp. 194-208 in J. Freeman (ed.), Women: A Feminist Perspective. Palo Alto, California: Mayfield.

Freud, Sigmund
1976 "Some psychical consequences of the anatomical differences between the sexes." Pp. 45-56 in P. C. Lee and R. S. Stewart (eds.), Sex Differences: Cultural and Developmental Dimensions. New York: Urizen Books.

Gandy, Gerald L.
1974 "Ordinal position research related to vocational interest." Journal of Counseling Psychology 21:281-87.

Glenn, Norval D., Adreain A. Ross and Judy C. Tully
1974 "Patterns of intergenerational mobility of females through marriage." American Sociological Review 39:683-99.

Goldberg, Steven
1974 The Inevitability of Patriarchy. New York: William Morrow.

Goodman, Leo A.
1969 "How to ransack social mobility tables and other kinds of cross-classification tables." American Journal of Sociology 75:1-40.

1972 "A general model for the analysis of surveys." American Journal of Sociology 77:1035-86.

Gross, Edward
1968 "Plus ca change . . .?: the sexual structure of occupations over time." Social Problems 16:198-208.

Gysbers, Norman C., Joseph A. Johnston and Tim Gust
1968 "Characteristics of homemaker- and career-oriented women." Journal of Counseling Psychology 15:541-6.

Haller, Archibald O.
1968 "On the concept of aspiration." Rural Sociology 33:484-7.

Haller, Archibald O. and Irwin W. Miller
1971 The Occupational Aspiration Scale. Cambridge, Massachusetts: Schenkman.

Haller, Archibald O., L. B. Otto, R. F. Meier, and G. W. Ohlendorf
1974 "Level of occupational aspiration: an empirical analysis." American Sociological Review 39:113-22.

Haller, Archibald O. and Alejandro Portes
1973 "Status attainment process." Sociology of Education 46: 51-91.

Hareven, Tamara K.
1976 "The family and gender roles in historical perspective." Pp. 93-118 in L. A. Cater, A. Firor, and W. Martynn (eds.), Women and Men: Changing Roles, Relationships, and Perceptions. New York: Aspen Institute.

Harrison, Forest
1969 "Aspirations as related to school performance and socioeconomic status." Sociometry 32:70-9.

Hauser, Robert M.
1969 "Schools and the stratification process." American Journal of Sociology 74:587-611.

Heider, Fritz
1958 The Psychology of Interpersonal Relations. New York: Wiley.

Heiss, Jerold
1976 "An introduction to the elements of role theory." Pp. 3-30 in Jerold Heiss (ed.), Family Roles and Interaction. 2nd Edition. Chicago: Rand McNally.

Hochschild, Arlie Russell
1973 "Review of sex role research." American Journal of Sociology 78:1011-29.

Hoffman, Lois W.
1974 "Effects of maternal employment on the child: a review of research." Developmental Psychology 10:204-28.

Horner, Matina
1970 "Femininity and successful achievement: a basic inconsistency." Pp. 45-74 in J. Bardwick, E. M. Douvan, M. S. Horner, and D. Gutmann (eds.), Feminine Personality and Conflict. Belmont, California: Brooks/Cole.

1972 "Toward an understanding of achievement-related conflicts in women." Journal of Social Issues 28:157-75.

Hout, Michael and William R. Morgan
1975 "Race and sex variations in the causes of expected attainment of high school seniors." American Journal of Sociology 81:364-94.

Hughes, Everett Charrington
1945 "Dilemmas and contradictions of status." American Journal of Sociology 50:353-9.

Hyde, Janet S. and B. G. Rosenberg
1976 Half the Human Experience. Lexington, Mass.: Heath.

Hyman, Herbert H.
1966 "The value system of different classes: a social-psychological contribution to the analysis of stratification." Pp. 426-42 in R. Bendix and S. M. Lipset (eds.), Class, Status, and Power: A Reader in Social Stratification. New York: Free Press.

Itzkoff, Seymour W.
1976 A New Public Education. New York: McKay.

Jencks, Christopher
1972 Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Harper Colophon Books.

Jensen, Arthur R.
1969 "How much can we boost IQ and scholastic achievement?" Harvard Educational Review 39:1-123.

Kandel, Denise B. and Gerald S. Lesser
1969 "Parental and peer influences on educational plans of adolescents." American Sociological Review 34:213-23.

Kardiner, Abram
1939 The Individual and His Society. New York: Columbia University Press.

1945 The Psychological Frontiers of Society. New York: Columbia University Press.

Kasarda, John D. and Morris Janowitz
1974 "Community attachment in mass society." American Sociological Review 39:328-39.

Katz, Marlaine Lockheed
1973 Female Motive to Avoid Success: A Psychological Barrier of a Response to Deviancy? Princeton, N.J.: Educational Testing Service.

Kerckhoff, Alan C.
1976 "The status attainment process: socialization or allocation?" Social Forces 55:368-81.

Kerckhoff, Alan C. and Richard T. Campbell
1977 "Race and social status differences in the explanation of educational ambition." Social Forces 55:701-14.

Klemmack, E. and J. Edwards
1973 "Women's acquisition of stereotyped occupational aspirations." Sociology and Social Research 57:510-25.

Knoke, David
1974 "Religious involvement and political behavior: a log-linear analysis of white Americans, 1952-1968." The Sociological Quarterly 15:51-65.

Knudsen, Dean D.
1969 "The declining status of women: popular myths and the failure of functionalist thought." Social Forces 48:183-93.

Kohlberg, Lawrence
1966 "A cognitive-developmental analysis of children's sex-role concepts and attitudes." Pp. 80-124 in E. E. Maccoby (ed.), The Development of Sex Differences. Stanford, California: Stanford University Press.

1969 "Stage and sequence: the cognitive development approach to socialization." Pp. 347-480 in D. A. Goslin (ed.), Handbook of Socialization Theory and Research. Chicago: Rand McNally.

Kohn, Melvin
1959 "Social class and the exercise of parental authority." American Sociological Review 24:312-56.

Kohn, Melvin and Carmi Schooler
1969 "Class, occupation, and orientation." American Sociological Review 34:659-78.

Kuhn, Manford H.
1964 "The reference group reconsidered." The Sociological Quarterly 5:6-21.

Kuvlesky, William P. and Robert C. Bealer
1966 "Clarification of the concept 'occupational choice'." Rural Sociology 31:265-76.

LaBarre, Weston
1954 The Human Animal. Chicago: University of Chicago Press.

1969 They Shall Take Up Serpents. New York: Schocken Books.

Lancaster, Eleanor B.
1973 "In praise of the achieving female monkey." Pp. 5-9 in C. Tavris (ed.), The Female Experience. Del Mar, Calif.: Communications Research Machines, Inc.

Levin, Henry M., James W. Guthrie, George B. Kleindorfer, and Robert T. Stout
1971 "School achievement and post-school success: a review." Review of Educational Research 41:1-16.

Lewis, Oscar
1966 "The culture of poverty." Scientific American 215-19-25.

Lipman-Blumen, Jean
1972 "How ideology shapes lives." Scientific American 226:34-72.

Lipman-Blumen, Jean and Patricia G. Thompson
1976 "Maternal employment and adult role orientations of young married women." Paper presented at the Annual Meeting of the American Sociological Association, New York, New York.

Lundin, Robert W.
1972 Theories and Systems of Psychology. Lexington, Mass.: D. C. Heath.

Lynn, David B.
1971 "The process of learning parental and sex-role identification." Pp. 42-53 in Edward Z. Dager (ed.), Socialization: Process, Product and Change. Chicago: Markham.

Maccoby, Eleanor E. and Carol Jacklin
1974 The Psychology of Sex Differences. Stanford: Stanford University Press.

Martin, Ann M.
1971 The Theory/Practice of Communicating Educational and Vocational Information. Boston: Houghton-Mifflin.

Martin, Walter T. and Dudley L. Poston, Jr.
1972 "The occupational composition of white females: sexism, racism, and occupational differentiation." Social Forces 50:349-55.

Mason, Karen O. and Larry L. Bumpass
1975 "The U. S. women's sex-role ideology, 1970." American Journal of Sociology 80:1212-26.

Mattnews, Esther and David V. Tiedeman
1964 "Attitudes toward career and marriage and the development of life style in young women." Journal of Counseling Psychology 2:375-84.

McClelland, David C.
1961 The Achieving Society. Princeton, N.J.: Van Nostrand.

McClelland, David C., J. W. Atkinson, R. A. Clark and E. L. Lowell
1953 The Achievement Motive. New York: Appleton-Century-Crofts.

McClendon, McKee J.
1976 "The occupational status attainment process of males and females." American Sociological Review 41:52-64.

Mead, George H.
1962 Mind, Self and Society. Chicago: University of Chicago Press.

Mehrabian, Albert
1968 "Male and female scales of the tendency to achieve." Educational and Psychological Measurement 28:493-502.

Meltzer, Bernard N. and John W. Petras
1972 "The Chicago and Iowa Schools of symbolic interactionism." Pp. 43-57 in J. G. Manis and B. N. Meltzer (eds.), Symbolic Interactionism: A Reader in Social Psychology. 2nd Edition. Boston, Mass.: Allyn and Bacon.

Merton, Robert K.
1968 Social Theory and Social Structure. Enlarged Edition. New York: Free Press.

Miller, Delbert C. and William H. Form
1951 Industrial Society. New York: Harper and Row.

Miller, Walter
1958 "Lower class culture as a generating milieu of gang delinquency." Journal of Social Issues 14:5-19.

Money, John and Anke Ehrhardt
1972 Man and Women, Boy and Girl. Baltimore: Johns Hopkins University Press.

National Center for Education Statistics
1977 The Condition of Education: A Statistical Report on the Condition of Education in the United States. Washington: U.S. Government Printing Office.

Nie, Norman H., C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner and Dale H. Bent
1975 Statistical Package for the Social Sciences. 2nd Edition. New York: McGraw-Hill.

Olive, Harriet
1973 "Sex differences in adolescent vocational preferences." Vocational Guidance Quarterly 23:199-201.

Ornstein, Michael D. and Peter H. Rossi
1970 "Going to work: an analysis of the determinants and consequences of entry into the labor force." Report No. 75, The Center for the Study of Social Organization of Schools. Baltimore, Md.: Johns Hopkins University.

Osgood, Charles E. and Peter H. Tannenbaum
1955 "The principle of congruity in the prediction of attitude change." Psychological Review 62:42-55.

Osipow, Samuel
1975 Emerging Women: Career Analysis and Outlooks. Columbus, Ohio: Charles E. Merrill.

Page, William F.
1977 "Interpretation of Goodman's log-linear model effects: an odds ratio approach." Sociological Methods and Research 5:419-35.

Parsons, Talcott
1951 The Social System. Glencoe: Free Press.

1976 "Family structure and the socialization of the child." Pp. 203-16 in P. C. Lee and R. S. Stewart (eds.), Sex Differences: Cultural and Developmental Dimensions. New York: Urizen Books.

Parsons, Talcott and Robert F. Bales
1955 Family, Socialization and Interaction Process. Glencoe: The Free Press.

Perrucci, Robert
1976 "Education, stratification and mobility." Pp. 105-55 in D. A. Hansen and J. E. Gerstl (eds.), On Education: Sociological Perspectives. New York: Wiley.

Picou, J. Steven
1971 Models of Adolescents' Occupational and Educational Projections: A Three Dimensional Approach. Unpublished Ph.D. Thesis, Louisiana State University.

Picou, J. Steven and Robert E. Campbell (eds. and contributors)
1975 Career Behavior of Special Groups: Theory, Research and Practice. Columbus, Ohio: Charles E. Merrill.

Picou, J. Steven and T. Michael Carter
1976 "Significant-other influence and aspiration." Sociology of Education 49:12-22.

Picou, J. Steven and Evans W. Curry
1973 "Structural, interpersonal, and behavioral correlates of female adolescents' occupational choices." Adolescence 8:421-32.

Picou, J. Steven and William G. Howard
1976 "Motivational determinants of status aspirations: comments on sex variations." Paper presented at the Annual Meeting of the Southwestern Sociological Society, Dallas, Texas.

Pleck, Joseph H.
1976 "The psychology of sex roles: traditional and new views." Pp. 181-199 in Libby A. Cater, Anne Firor, and Wendy Martynn (eds.), Women and Men: Changing Roles, Relationships, and Perceptions. New York: Aspen Institute.

Portes, Alejandro and Kenneth L. Wilson
1976 "Black-white differences in educational attainment. American Sociological Review 41:414-31.

Porter, James N.
1974 "Race, socialization and mobility in educational and early occupational attainment." American Sociological Review 39: 303-16.

Prediger, Dale J., John D. Roth and Robert J. Noeth
1973 Nationwide Study of Student Career Development: Summary of Results. Iowa City: Research and Development Division, The American College Testing Program. (ACT Research Report No. 61).

Psathas, George
1968 "Toward a theory of occupational choice for women." Sociology and Social Research 52:253-68.

Rainwater, Lee
1967 "Crucible of identity: the Negro lower-class family." Pp. 362-400 in G. Handel (ed.), The Psychosocial Interior of the Family. Chicago: Aldine Atherton.

Rehberg, Richard A.
1967 "Adolescent career aspirations and expectations: evaluation of two contrary stratification hypotheses." Pacific Sociological Review 10:81-90.

Rehberg, Richard A., Judie Sinclair and Walter E. Schafer
1970 "Adolescent achievement behavior, family authority structure, and parental socialization practices." American Journal of Sociology 75:1012-34.

Risch, Constance and Lawrence Beymer
1967 "A framework for investigating the career choice of women." Vocational Guidance Quarterly 16:87-92.

Roby, Pamela
1975 "Structured and internalized barriers to women in higher education." Pp. 171-93 in J. Freeman (ed.), Women: A Feminist Perspective. Palo Alto, California: Mayfield.

Rosen, Bernard C.
1956 "The achievement syndrome." American Sociological Review 21:47-60.

1959 "Race, ethnicity, and the achievement syndrome." American Sociological Review 24:50-3.

1961 "Family structure and achievement motivation." American Sociological Review 26:574-85.

Rosen, Bernard G. and R. D'Andrade
1959 "The Psychosocial origins of achievement motivation." Sociometry 22:185-218.

Rosenberg, Bernard G. and Brian Sutton-Smith
1960 "A revised conception of masculine-feminine differences in play activities." Journal of Genetic Psychology 96:165-70.

1972 Sex and Identity. New York: Holt, Rinehart, and Winston.

Rosenfeld, Rachel A.
1978 "Women intergenerational occupational mobility." American Sociological Review 43:36-46.

Rubin, Zick
1968 "Do American women marry up?" American Sociological Review 33:750-60.

Ryan, William
1976 Blaming the victim. Revised, Updated Edition. New York: Vintage Books.

Sampson, Elizabeth E.
1963 "Achievement in conflict." Journal of Personality 31:510-16.

Sapir, Edward
1949 Selected Writings in Language, Culture and Personality. Berkeley: University of California Press.

Scanzoni, John
1967 "Socialization, achievement and achievement values." American Sociological Review 32:449-56.

Schlossberg, Nancy K. and Jane Goodman
1972 "A woman's place: children's sex stereotyping of occupations." Vocational Guidance Quarterly 20:266-70.

Schmelz, Jerome
1976 "Rising aspirations of American women and the declining birth rate." International Journal of Sociology of the Family 6:179-96.

Sewell, William E.
1971 "Inequality of opportunity for higher education." American Sociological Review 36:793-809.

Sewell, William A., Archibald O. Haller, and George W. Ohlendorf
1970 "The educational and early occupational status attainment process: replication and revision." American Sociological Review 35:1014-27.

Sewell, William H., Archibald O. Haller, and Alejandro Portes
1969 "The educational and early occupational attainment process." American Sociological Review 34:82-92.

Sewell, William H., Archibald O. Haller, and Murray A. Strauss
1957 "Social status and educational and occupational aspiration." American Sociological Review 22:67-73.

Sewell, William H. and Robert M. Hauser
1972 "Causes and consequences of higher education: models of the status attainment process." American Journal of Agricultural Economics 54:851-61.

Sewell, William H. and Alan M. Orenstein
1965 "Community of residence and occupational choice." American Journal of Sociology 70:551-63.

Sewell, William H. and Vimal P. Shah
1967 "Socioeconomic status, intelligence, and the attainment of higher education." Sociology of Education 40:1-23.

1968a "Social class, parental encouragement, and educational aspirations." American Journal of Sociology 73:559-72.

1968b "Parent's education and children's educational aspirations and achievements." American Sociological Review 33:191-209.

Schneider, David M. and Raymond T. Smith
1973 Class Differences and Sex Roles in American Kinship and Family Structures. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Siegal, Charles L. F.
1973 "Sex differences in the occupational choices of second graders." Journal of Vocational Behavior 3:15-19.

Siegel, Sidney
1956 Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company.

Simpson, Ida Harper
1972 "Patterns of socialization into professors: the case of student nurses." Pp. 169-77 in Ronald M. Pavalko (ed.), Sociological Perspectives on Occupations. Itasca, Illinois: F. E. Peacock Publishers.

Slocum, Walter
1966 Occupational Careers: A Sociological Perspective. Chicago: Aldine.

Sowell, Thomas
1974 Black Education: Myths and Tragedies. New York: David McKay.

Spady, William G.
1970 "Simple techniques for multivariate analysis or how to amaze your colleagues without the aid of a computer." Interchange 1:3-20.

Steel, Robert G. D. and James A. Torrie
1960 Principles and Procedures of Statistics. New York: McGraw-Hill.

Stephenson, Richard M.
1957 "Mobility orientations and stratification of 1,000 ninth graders." American Sociological Review 22:204-12.

Stockard, Jean
1977 "The influence of family background and other experiences on the sex role related attitudes of male and female late adolescents and young adults." Paper presented at the Annual Meetings of the American Sociological Association, Chicago, Illinois.

Stoll, Clarice Stasz
1974 Female and Male: Socialization, Social Roles, and Social Structure. Dubuque, Iowa: Wm. C. Brown.

Stolzenberg, Ross M. and Linda J. Waite
1977 "Age, fertility expectations and plans for employment." American Sociological Review 42:769-83.

Strober, Myra H.
1976 "Women and men in the world of work: present and future." Pp. 119-52 in L. A. Cater, A. Firor Scott, and W. Martynn (eds.), Women and Men: Changing Roles, Relationships, and Perceptions. New York: Aspen Institute.

Super, Donald
1957 The Psychology of Careers. New York: Harper and Row.

Suter, Leland E. and Harold P. Miller
1973 "Income differences between men and career women." American Journal of Sociology 78:963-75.

Tangri, Sandra Schwartz
1972 "Determinants of occupational role innovation among college women." Journal of Social Issues 28:177-200.

Taylor, Patricia Ann and Norval D. Glenn
1976 "The utility of education and attractiveness for females' status attainment through marriage." American Sociological Review 41:484-98.

Tiger, Lionel
1970 Men in groups. New York: Vintage.

Tiger, Lionel and Robin Fox
1972 The Imperial Animal. New York: Holt, Rinehart and Winston.

Treas, Judith
1976 "Differential achievement: race, sex, and jobs." Presented at the 71st Annual Meeting of the American Sociological Association, New York, New York.

Treiman, Donald J. and Kermit Terrell
1975 "Sex and the process of status attainment: a comparison of working women and men." American Sociological Review 40: 174-200.

Turner, Jonathan E.
1970 "Entrepreneurial environments and the emergence of achievement motivation in adolescent males. Sociometry 33:147-65.

Turner, Ralph H.
1962 "Role-taking: process versus conformity." Pp. 20-40 in A. M. Rose (ed.), Human Behavior and Social Process: An Interactionist Approach. Boston, Mass.: Houghton-Mifflin Co.

1964 "Some aspects of women's ambition." American Journal of Sociology 70:271-85.

Uhlenberg, Peter
1972 "Demographic correlates of group achievement: contrasting patterns of Mexican-Americans and Japanese-Americans." Demography 9:119-28.

U.S. Department of Labor, Women's Bureau
1972 The Myth and the Reality. Washington, D.C.: Government Printing Office.

1975 Handbook of Women Workers. Washington, D.C.: Government Printing Office.

Vetter, Louise
1975 "The majority-minority: American women and careers. Pp. 224-40 in J. S. Picou and R. E. Campbell (eds.), Career Behavior in Special Groups. Columbus, Ohio: Charles E. Merrill.

Warner, W. Lloyd and Paul Lunt
1945 The Social Life of a Modern Community. New Haven: Yale University Press.

Warshay, Leon
1975 "Domination of sociology by small theories and empiricism: a call for research into the large theory illusion." Social Science 50:87-93.

Weisstein, Naomi
1971 "Psychology constructs the female." Pp. 207-24 in V. Gornick and B. K. Moran (eds.), Women in Sexist Society. New York: Basic Books.

Weitzman, Lenore J.
1975 "Sex-role socialization." Pp. 105-44 in J. Freeman (ed.), Women: A Feminist Perspective. Palo Alto, California: Mayfield.

Weitzman, Lenore J., Deborah Eifles, Elizabeth Hokada, and Catherine Ross
1972 "Sex role socialization in picture books for pre-school children." American Journal of Sociology 72:1125-50.

Weston, Peter J. and Martha T. Mednick
1970 "Race, social class, and the motive to avoid success in women." Journal of Cross-Cultural Psychology 1:294-301.

White, Martha S.
1970 "Psychological and social barriers to women in science." Science 170:413-16.

Williams, Robin M. Jr.
1960 American Society: A Sociological Interpretation. New York: Alfred A. Knopf.

Williams, Thomas Rhys
1972 Introduction to Socialization: Human Cultures Transmitted. Saint Louis: The C. V. Mosby Company.

Woefel, Joseph and Archibald O. Haller
1971 "Significant-others, the self-reflexive act and the attitude formation process." American Sociological Review 36:74-87.

Wrong, Dennis
1961 "The over-socialized conception of man in modern sociology." American Sociological Review 26:183-93.

Yarrow, Leon J.
1964 "Separation from parents during early childhood." Pp. 78-95 in M. L. Hoffman and L. W. Hoffman (eds.), Review of Child Development. New York: Wiley.

Zigler, Edward and Irvin L. Child
1969 "Socialization." Pp. 450-589 in G. Lindzey and E. Aronson (eds.), Handbook of Social Psychology. 2nd Edition. Reading, Mass.: Addison-Wesley.

Zytowski, Donald G.
1969 "Toward a theory of career development for women." Personnel and Guidance Journal 47:660-4.

APPENDIX A

QUESTIONNAIRE ITEMS USED IN THE STUDY

QUESTIONNAIRE ITEMS

Only those items which were not adequately explained in the main text are dealt with here. Thus, Mother's Occupation, all three Parental Achievement Training variables, Independence, all nine Sex-Role Stereotype variables, Family Authority Structure, and Educational Expectations are not discussed. Where the questionnaire items presented in this Appendix were dichotomized, that procedure is described in Chapter III.

Sex:

Sex (Circle one Number): 1. Male 2. Female

Race:

What is your race? (Circle one number):

1. Red
2. Black
3. White
4. Yellow
5. Other ______________________

The above codes were dichotomized into white and nonwhite, which was referred to as black since there were only 23 respondents in the total sample who did not indicate white or black on this question.

Parents' Marital Status:

This was the questionnaire item used to form the Intactness of the Family variable discussed in Chapter III. On the questionnaire, this item was presented as follows:

What is the marital status of your mother and father? (Circle one number):

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1. Both alive, living together	4. Father not living
2. Both alive, separated	5. Mother not living
3. Both alive, divorced	6. Neither father nor mother living

Father's/Mother's Educational Level:

What was the highest school grade completed by your father? your mother?

1. Did not go to school
2. First grade
3. Second grade
4. Third grade
5. Fourth grade
6. Fifth grade
7. Sixth grade
8. Seventh grade
9. Eighth grade
10. Ninth grade
11. Tenth grade
12. Eleventh grade
13. Twelfth grade
14. Completed Vocational-Technical school graduate
15. Some college, but did not graduate
16. Graduated from college
17. Graduated from college and has completed graduate work
18. Graduated from college and has received a master's degree
19. Has a graduate or professional degree (Ph.D., Doctor, Lawyer)

Father's Occupation:

What is your father's occupation? (Write your answer in the following box. Give the specific job. For example say carpenter, not construction worker. This question refers to his present job if your father is employed or his last job if your father is unemployed):

ANSWER: ______________________________

a.) Is or was your father (circle one number):

1. self-employed   2. employed by someone else

b.) What kind of place does your father work in (for example teacher in high school or college, etc., or laborer in chemical plant or sawmill or construction, etc.):

____

Occupational Expectations:

Sometimes we are not able to do what we desire. Taking all the facts of your job future into consideration including your own personal ability and the opportunities you really think you have, what job do you really expect to have most of your life? (Write your answer in the box below. Please give an exact job).

ANSWER: ______________________________

a.) For this job, would you be (circle one number):

1. self-employed 2. employed by someone else

b.) What kind of place would this job be in?______________________

Marital and Fertility Plans:

Do you want to get married someday? (Circle one number):

1. Yes 2. No 3. Already married

a.) If you answered yes to the above question, or you are already married answer the following questions:

1. At what age would you like to get married (or at what age were you married)?______________________________

2. How many children do you expect to have?__________________

APPENDIX B

COMPARISON OF ANALYSIS AND ORIGINAL DATA SET

A NOTE ON THE COMPARABILITY OF THE SAMPLES

The comparability of the analysis data set (ADS) was tested by comparison of distributions of selected demographic characteristics with the original data set (ODS) distributions of the same characteristics. The comparison variables are: sex, race, residence, father's and mother's educational level, and parent's marital status.

Comparability of the ADS to the ODS was evaluated as extensively as available data permitted. Demonstration of comparability rests with the statistical inference of no difference between the ADS distributions and the ODS distributions. The comparisons conducted are sufficiently specific to discriminate discrepencies (between the ADS's and the ODS's distribution of characteristics) of sufficient magnitude to imply bias in the sample.

Prior to reporting the results of the comparisons, a brief note on the statistical procedures is necessary. The Z-test of differences between percentages is computed by the following formula

$$Z = (P_1 - P_2)/(P_1Q_1/N_1 + P_2Q_2/N_2)^{1/2}$$

where P_1 is the percentage reporting a given level of a variable in the original data set and P_2 is the percentage reporting the same level for the analysis data set. Also, $Q_1 = 1 - P_1$ and $Q_2 = 1 - P$[illegible] and N_1 and N_2 are the respective sample sizes. To reject a null hypothesis by a non-directional test at the .05 level, the reported Z value would have to lie outside the interval $-1.96 < Z < 1.96$ (Blalock, 1972:228-230).

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For the interval level variables, the t-test of the differences between means was used for the comparison of the two samples. No estimate of common population variance is necessary since evidence suggests that the assumption of homogeneity of variances is not necessary for samples greater than 30 or 40 (Clarke et al., 1965:229). Therefore, the formula used for these computations is

$$t = (\overline{X}_1 - \overline{X}_2)/(S_1^2/N_1 + S_2^2/N_2)^{1/2}$$

where $\overline{X}_1$ is the mean for the original data set and $\overline{X}_2$ is the mean for the analysis data set. Also, S_1^2 and S_2^2 are the respective variances. N_1 and N_2 are the respective sample sizes (Clarke et al.,1965; Steel and Torrie, 1960). The obtained t is compared to the Z distribution because, for degrees of freedom which are large, the t distribution is closely approximated by the normal curve (Clarke et al., 1965:229). So to reject a null hypothesis, the t value would have to lie outside the interval $-1.96 < t < 1.96$.

The third procedure, Kolmogorov-Smirnov two-sample test, is appropriate for variables considered to be of less than an interval level or which are considered to be non-parametric non-dichotomous. The distributions are compared rather than individual categorical proportions because of the compatability of each category and this allows for a more sensitive test of the null hypothesis. The one-sided test is used when the alternate hypothesis assumes that the population from which one sample was drawn is larger than the population values from which the other sample was drawn, whereas the two-sided test is used to test the alternate hypothesis that the two samples are from different populations (Siegel, 1956:128). Since the latter is the primary concern of this appendix, only the results from the two-sided test will be presented. The one-sided tests were also computed yielding no significantly different results than the two-sided tests. The two-sided hypothesis employs the following formula for a .05 level of significance

$$D_{critical} = (1.36)\ (N_1 + N_2/N_1N_2)^{1/2}$$

where N_1 and N_2 are sample sizes and $D_{critical}$ is the value that the maximum absolute value of D must exceed to reject the null hypothesis at this level of significance.

Table B1 presents a summary of the tests of comparison. For mother's and father's education both the t-test and Kolmogorov-Smirnov were performed in order to be sure there were no differences between the analysis and original data set whether the variables were considered to be at the ordinal or interval level. This summary table indicates that there are no significant differences between the two samples on any of these background variables. (The calculations on which this table are based are on file in the Department of Sociology).

Table B1. Summary Table of Comparisons between Analysis and Original Data Set

Comparison Variable	t-test*	Z test*	Kolmogorov-Smirnov**
Sex	N.A.	-1.08 NS	N.A.
Race	N.A.	N.A.	D = 0.015 NS
Dichotomous Race	N.A.	1.31 NS	N.A.
Residence	N.A.	N.A.	D = 0.014 NS
Dichotomous Residence	N.A.	0.54 NS	N.A.
Parents' Marital Status	N.A.	N.A.	D = 0.016 NS
Dichotomous Intactness of Family	N.A.	-1.11 NS	N.A.
Father's Education	1.30 NS	N.A.	D = 0.019 NS
Mother's Education	1.01 NS	N.A.	D = 0.038 NS

*For t and Z tests in order for the difference to be significant, the value must be greater than 1.96.

**The D value must be greater than .038 for the difference to be significant.

N.A. = Not Applicable.
NS = Non-significant.

VITA

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